

**NEW ISSUE
BOOK-ENTRY ONLY**

**RATINGS: Moody's: Aaa
Fitch: AAA
(See "Ratings" herein)**

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, compliance with certain covenants, interest on the Series 2001 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, and all of the Series 2001 Bonds and the income therefrom are exempt from all taxation by the State of Hawaii or any county or other political subdivision thereof, except inheritance, transfer, estate and certain franchise taxes. In the further opinion of Bond Counsel, interest on the Series 2001 Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings in calculating corporate alternative minimum taxable income. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the Bonds. See "TAX MATTERS" in this Official Statement.

\$136,020,000
City and County of Honolulu
Wastewater System Revenue Bonds
(First Bond Resolution)
Senior Series 2001

Dated: July 15, 2001

Due: July 1, as shown on inside cover

The Series 2001 Bonds are issuable in fully registered form and when issued will be registered initially in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"), New York, New York. So long as DTC or its nominee is the registered owner of the Series 2001 Bonds, purchases of the Series 2001 Bonds will be made in book-entry form only, through brokers and dealers who are, or who act through, DTC participants; beneficial owners of the Series 2001 Bonds will not receive physical delivery of Bond certificates; payment of the principal of and interest and any premium on the Series 2001 Bonds will be made directly to DTC or its nominee; and disbursement of such payments to DTC participants will be the responsibility of DTC and disbursement of such payments to the beneficial owners will be the responsibility of DTC participants. Purchases of the Series 2001 Bonds may be made in the denomination of \$5,000 or any integral multiple thereof.

The Series 2001 Bonds bear interest payable on January 1 and July 1 of each year, commencing January 1, 2002. The Series 2001 Bonds are subject to redemption prior to the stated maturity thereof as described herein.

The proceeds of the Series 2001 Bonds will be used: (i) to fund the cost of certain additions and improvements to the Wastewater System owned by the City and County of Honolulu (the "City and County"); (ii) to fund a reserve; and (iii) to pay the costs of issuance of the Series 2001 Bonds.

The Series 2001 Bonds will be issued by the City and County under a bond resolution, as supplemented (the "First Resolution"), pursuant to which the City has previously issued bonds and may issue additional bonds on a parity with the Series 2001 Bonds, as described herein (collectively with the Series 2001 Bonds, the "Bonds"). The Series 2001 Bonds are limited special obligations of the City and County payable solely from, and secured solely by, a pledge of proceeds of Bonds held or set aside under the First Resolution, the Net Revenues, and certain funds and accounts established by the First Resolution, on a parity with all other Bonds issued under the First Resolution. Such pledge of the Net Revenues is senior and superior to any pledge of the Net Revenues to secure obligations issued under any other bond resolution. **The Bonds are not a general or moral obligation of the State of Hawaii or any political subdivision thereof, including the City and County, and the faith and credit of the State of Hawaii or any political subdivision thereof, including the City and County, are not pledged to the payment of the principal of, premium, if any, or interest on the Bonds, and no holder of the Bonds shall have the right to compel the exercise of the taxing power of the State of Hawaii or any political subdivision thereof, including the City and County, in connection with any default with respect to the Bonds.**

Payment of the principal of and interest on the Series 2001 Bonds when due will be insured by a financial guaranty insurance policy to be issued by Ambac Assurance Corporation simultaneously with the delivery of the Series 2001 Bonds.

Ambac

This cover page contains certain information for quick reference only. It is not a summary of the bond issue. Prospective investors must read the entire Official Statement (including the Appendices) to obtain information essential to the making of an informed investment decision.

The Series 2001 Bonds are offered when, as and if issued and received by the Underwriters, and are subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Bond Counsel to the City and County. Certain legal matters will be passed upon for the Underwriters by their counsel, McCorriston Miller Mukai MacKinnon LLP, Honolulu, Hawaii. It is expected that the Series 2001 Bonds in definitive form will be available for delivery to DTC, in New York, New York, on or about July 26, 2001.

Salomon Smith Barney

UBS PaineWebber Inc.

Dated: July 10, 2001

\$136,020,000
City and County of Honolulu
Wastewater System Revenue Bonds
(First Bond Resolution)
Senior Series 2001

Maturity Schedule

Serial Bonds, \$74,420,000

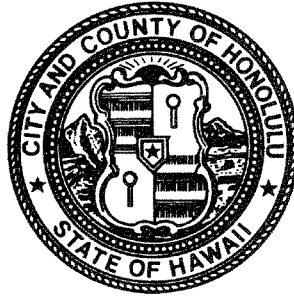
<u>Year</u> <u>(July 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>Year</u> <u>(July 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>
2005	\$2,365,000	5.00%	3.70%	2015	\$3,950,000	5.50%	4.90% *
2006	2,475,000	4.00	3.84	2016	4,175,000	5.50	4.97 *
2007	2,590,000	5.00	4.01	2017	4,410,000	5.50	5.04 *
2008	2,725,000	5.00	4.17	2018	4,660,000	5.50	5.09 *
2009	2,860,000	5.00	4.31	2019	4,920,000	5.25	5.18 *
2010	3,010,000	5.00	4.41	2020	5,185,000	5.25	5.21 *
2011	3,170,000	5.50	4.51	2021	5,465,000	5.25	5.23 *
2012	3,350,000	5.50	4.64 *	2022	5,760,000	5.25	5.25
2013	3,540,000	5.50	4.74 *	2023	6,070,000	5.25	5.27
2014	3,740,000	5.50	4.83 *				

\$61,600,000 5.125% Term Bonds Due July 1, 2031, Price 96.125

(plus accrued interest from July 15, 2001)

* Priced to call date of July 1, 2011.

City and County of Honolulu
State of Hawaii
(Incorporated 1907)



MAYOR
Jeremy Harris

CITY COUNCIL

Jon C. Yoshimura
Chair and Presiding Officer

John DeSoto
Vice-Chair

Steve Holmes
Floor Leader

Duke Bainum

John Henry Felix

Rene Mansho

Andy Mirikitani

Gary H. Okino

Romy M. Cachola

DIRECTOR OF BUDGET AND FISCAL SERVICES
Caroll Takahashi

ACTING DIRECTOR OF ENVIRONMENTAL SERVICES
Timothy E. Steinberger

CORPORATION COUNSEL
David Z. Arakawa

BOND COUNSEL
Orrick, Herrington & Sutcliffe LLP
San Francisco, California

No dealer, broker, salesperson or other person has been authorized by the City and County of Honolulu, Hawaii or by the Underwriters to give any information or to make any representations other than as contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of, the Series 2001 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been furnished by the City and County of Honolulu, Hawaii and by other sources which are believed to be reliable but is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the Underwriters. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City and County since the date hereof.

In connection with this offering, the Underwriters may over-allot or effect transactions which stabilize or maintain the market price of the Series 2001 Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time. The Underwriters may offer and sell the Series 2001 Bonds to certain dealers and certain dealer banks and banks acting as agents at prices lower than the public offering prices stated on the cover page hereof and said public offering prices may be changed from time to time by the Underwriters.

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OFFICIAL STATEMENT

\$136,020,000

City and County of Honolulu

Wastewater System Revenue Bonds
(First Bond Resolution)
Senior Series 2001

INTRODUCTORY STATEMENT

This Official Statement, which includes the cover page and the appendices, provides certain information in connection with the issuance by the City and County of Honolulu (the "City and County") of \$136,020,000 aggregate principal amount of Wastewater System Revenue Bonds (First Bond Resolution), Senior Series 2001 (the "Series 2001 Bonds"). The Series 2001 Bonds are to be issued under and secured by the First Wastewater Revenue Bond Resolution adopted by the City Council of the City and County on November 10, 1998 (the "First Bond Resolution"), and the Series 2001 Resolution adopted by the City Council of the City and County on June 20, 2001 (the "Series 2001 Resolution"). The First Bond Resolution, as amended and supplemented, is referred to herein as the "First Resolution."

The capitalization of any word herein not conventionally capitalized indicates that such word is defined in the First Resolution or this Official Statement. A glossary of certain terms used in this Official Statement and the First Resolution is set forth in Appendix C under "Certain Definitions."

The proceeds of the Series 2001 Bonds will be used: (i) to fund the cost of certain additions and improvements to the Wastewater System of the City and County; (ii) to fund the Common Reserve Account in an amount which, together with amounts on deposit therein, is equal to the Common Reserve Account Requirement; and (iii) to pay the costs of issuance of the Series 2001 Bonds.

The Series 2001 Bonds are the second series of bonds (each a "Series" and collectively, the "Bonds") issued under and pursuant to the First Resolution and will be secured by and entitled to the protection of the First Resolution on a parity with all Bonds heretofore issued and to be hereafter issued under and pursuant to the First Resolution. The Bonds are limited special obligations of the City and County payable solely from, and secured solely by a pledge of, proceeds of Bonds held or set aside under the First Resolution, the Net Revenues, and certain funds and accounts established by the First Resolution. Such pledge of the Net Revenues is senior and superior to any pledge of the Net Revenues to secure obligations issued under and pursuant to any other bond resolution. See "SECURITY FOR THE BONDS."

In 1998, the City and County issued \$55,300,000 of Bonds under the First Resolution, and, as part of the same plan of finance, also issued \$264,152,890 principal amount of Wastewater System Revenue Bonds (Second Bond Resolution), Junior Series 1998 (the "Junior Series 1998 Bonds"), under a Second Wastewater Revenue Bond Resolution adopted by the City Council of the City and County on November 10, 1998 (as supplemented, the "Second Resolution"). The Junior Series 1998 Bonds are limited special obligations of the City and County payable solely from, and secured solely by a pledge of, the Net Revenues, proceeds of bonds held or set aside under the Second Resolution and certain funds and accounts established by the Second Resolution. Such pledge of the Net Revenues is junior and subordinate to the pledge of the Net Revenues to secure the Bonds issued under and pursuant to the First Resolution. The Junior Series 1998 Bonds are considered to be Subordinate Obligations for purposes of the First Resolution.

The Department of Environmental Services (the "Department") has the full and complete authority to manage, control and operate the Wastewater System owned or managed and under the jurisdiction of the City and County, including all materials, supplies, equipment and properties used or useful in connection with the Wastewater System. The Department was created July 1, 1998, as part of a City-wide reorganization to streamline

operations. Previously, the Department of Wastewater Management, created by a City Charter change effective July 1, 1993, provided operation, maintenance, planning, design and construction of wastewater facilities in the City and County. The City Charter and Chapter 49, Hawaii Revised Statutes (the "Act") empower the City and County to issue revenue bonds in its name for the purposes of the Wastewater System. See "THE CITY AND COUNTY AND THE DEPARTMENT."

The Wastewater System services approximately 130,000 separate accounts and a population of approximately 600,000, which is approximately 70% of the total population of the City and County. The service area covers nearly 500 square miles. The customer base includes the residential population, business and industrial, and other users located in the service area. Of the 130,000 accounts, 123,000 are residential, representing 77.8% of the total revenue from sewer service charges; and the remaining 7,000 are non-residential, representing 22.2% of the total revenue from sewer service charges. The average total volume of wastewater processed by the City and County's Wastewater System is 113.6 million gallons per day. A number of small private wastewater systems also serve some areas in the City and County. The average total volume of wastewater processed by all such private systems is 4.1 million gallons per day. See "THE WASTEWATER SYSTEM."

The additions and improvements to the Wastewater System, the costs of which are to be financed from the proceeds of the Series 2001 Bonds, are part of a five year capital improvement program adopted by the Department and approved by the City Council of the City and County (the "2001-2005 Capital Improvement Program"). The 2001-2005 Capital Improvement Program is projected to cost approximately \$907 million (in inflated dollars) and is being undertaken for the purposes, among others, of meeting certain consent decrees entered into by the Department with Federal and State regulatory bodies and reliably serving projected growth in the number of customers served by the Wastewater System. The 2001-2005 Capital Improvement Program is a part of the 1998-2017 twenty year capital improvement program (the "1998-2017 Capital Improvement Program") the Department has undertaken. The 1998-2017 Capital Improvement Program is projected to cost approximately \$2.4 billion (in inflated dollars) and has been undertaken for the same basic purposes as the 2001-2005 Capital Improvement Program. The cost of the 1998-2017 Capital Improvement Program, including the 2001-2005 Capital Improvement Program, is expected to be financed primarily from (i) the proceeds of the Series 2001 Bonds and Bonds previously issued, (ii) proceeds of additional Bonds and Subordinate Obligations to be hereafter issued, (iii) proceeds of Reimbursable Obligations previously issued and currently available, (iv) the Net Revenues of the Wastewater System, and (v) Wastewater System Facilities Charges. See "THE CAPITAL IMPROVEMENT PROGRAM" and Appendix B, "Engineer's Report."

Carollo Engineers, P.C., Consulting Engineer (the "Consulting Engineer"), has projected revenues, expenses and coverages for the Wastewater System for the Fiscal Years 2001-2010, inclusive. The projections are based on inflated dollars (*i.e.*, adjusted from 2001 dollars). The projections indicate that with respect to the Fiscal Years 2001-2010, inclusive, the City and County can (i) issue the Series 2001 Bonds to finance \$125 million of necessary additions and improvements to the Wastewater System, to fund the Common Reserve Account in an amount sufficient to satisfy its requirement, and to pay the costs of issuing the Series 2001 Bonds; (ii) finance an additional \$1.45 billion of improvements to the Wastewater System from proceeds of additional Bonds and Subordinate Obligations to be hereafter issued, proceeds of Reimbursable Obligations previously issued and currently available, proceeds of wastewater revenue bonds previously issued and currently available, the Net Revenues and Wastewater System Facility Charges over the nine year period; and (iii) fully meet all reserve funding and coverage requirements under the First Resolution and the Second Bond Resolution by raising sewer rates and charges by 11% in Fiscal Year 2003-2004 and another 6% to 12% in each of the Fiscal Years thereafter, and by raising Wastewater System Facility Charges by 3.0% in Fiscal Year 2003-2004 and another 3.0% in each of the Fiscal Years thereafter. The average monthly residential wastewater charge is expected to increase from \$33.35 to \$64.29 (in inflated dollars) by 2010. The Wastewater System Facility Charge is expected to increase from \$1,146 to \$1,409 (in inflated dollars) by 2010. The Consulting Engineer has concluded that current customer rates and charges for the City and County compare favorably to other similar wastewater agencies. See Appendix B, "Engineer's Report."

Pursuant to the Chapter 49, Hawaii Revised Statutes (the "Act") and the City Charter, the City Council has the power to impose, prescribe and collect rates, rentals, fees or charges for the use and services of, and the facilities furnished by, the Wastewater System so that the Wastewater System will be and remain self-sustaining. The rates, rentals, fees or charges imposed and prescribed are required to produce revenues which will be at least sufficient to

pay debt service on all revenue bonds issued for the purposes of the Wastewater System, including the Bonds and the Subordinate Obligations, to provide reserves therefor, to pay the costs of operation, maintenance and repair of the Wastewater System, and to carry out the covenants of all resolutions authorizing the issuance of revenue bonds for the purposes of the Wastewater System, including the First Resolution and the Second Resolution. The rates and charges fixed and imposed by the City Council are not subject to approval by any federal or state regulatory bodies. The City Council has not as of the date of this Official Statement adopted any of the rate increases discussed in the Engineer's Report.

SOURCES AND USES OF FUNDS

Sources and uses of funds with respect to the Series 2001 Bonds are as follows:

Sources of Funds	
Principal Amount of Series 2001 Bonds.....	\$136,020,000.00
Plus Accrued Interest	216,233.26
Less Net Original Issue Discount	<u>(151,176.80)</u>
Total Sources	<u>\$136,085,056.46</u>
Uses of Funds	
Deposit to Improvement Account	\$125,001,169.77
Deposit to Debt Service Account	216,233.26
Common Reserve Account	9,385,515.88
Cost of Issuance*	<u>1,482,137.55</u>
Total Uses	<u>\$136,085,056.46</u>

* Includes insurance premium and underwriters' discount

THE SERIES 2001 BONDS

General

The Series 2001 Bonds will be dated and bear interest from July 15, 2001, with interest payable on January 1 and July 1 of each year, commencing January 1, 2002, at the rates per annum and will mature in the principal amounts on July 1 in each year, as set forth on the inside cover page of this Official Statement.

Optional Redemption

The Series 2001 Bonds maturing after July 1, 2011, are subject to redemption at the option of the City and County, on or after July 1, 2011 in whole or in part at any time, from any maturities selected by the City and County at a redemption price equal to 100% of the principal amount of the Series 2001 Bonds or portions thereof to be redeemed, plus accrued interest to the date of redemption.

Mandatory Redemption

The Series 2001 Bonds maturing on July 1, 2031 are also subject to redemption, in part, on each of the dates and in the respective principal amounts set forth below, at a Redemption Price of 100% of the principal amount thereof, plus accrued interest to the date of redemption, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem the principal amount of Series 2001 Bonds specified for July of each of the years shown below:

Series 2001 Bonds
Maturing July 1, 2031

<u>Year</u> <u>(July 1)</u>	<u>Principal</u> <u>Amount</u>
2024	\$6,390,000
2025	6,725,000
2026	7,080,000
2027	7,455,000
2028	7,845,000
2029	8,260,000
2030	8,695,000
2031†	9,150,000

† Final maturity.

Notice of Redemption

The City and County will mail notice of redemption not less than 30 days prior to the redemption date by registered, certified or regular first-class mail, to the registered owners of any of the Series 2001 Bonds or portions of the Series 2001 Bonds which are to be redeemed, at their last addresses appearing upon the Bond Registry. The City and County may also but is not required to cause such notice to be published at least once in such newspapers as provided in the First Resolution not less than thirty (30) days prior to the date fixed for redemption date. Failure of the City and County to publish any such notice shall not affect the validity of the proceedings for the redemption of such Series 2001 Bonds. See "THE SERIES 2001 BONDS - Book-Entry System."

Effect of Redemption

If, on the redemption date, moneys for the redemption of all the Series 2001 Bonds or portions thereof of any maturity to be redeemed, together with interest to the redemption date, shall be held by the City and County or Paying Agent so as to be available therefor on said date and if notice of redemption shall have been given as provided in the First Resolution, then, from and after the redemption date, interest on the Series 2001 Bonds or portions thereof of such maturity so called for redemption shall cease to accrue and become payable. If such moneys shall not be so available on the redemption date, such Series 2001 Bonds or portions thereof shall continue to bear interest until paid at the same rate as they would have borne had they not been called for redemption.

Selection for Redemption

So long as the Book-Entry System for the Series 2001 Bonds is in effect, if less than all of the Series 2001 Bonds of any one maturity are to be redeemed, the particular Series 2001 Bonds or portions of Series 2001 Bonds of such maturity to be redeemed will be selected by DTC and its Participants in such manner as DTC and its Participants may determine. If the Book-Entry System for the Series 2001 Bonds is no longer in effect, selection for redemption of less than all Series 2001 Bonds of any one maturity will be made by the Paying Agent by lot as provided in the First Resolution.

Book-Entry System

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Series 2001 Bonds. The Series 2001 Bonds will be issued as fully-registered securities in the name of Cede & Co. (DTC's partnership nominee). One fully-registered Series 2001 Bond certificate will be issued for each maturity of the Series 2001 Bonds, each in the aggregate principal amount of such maturity of such series, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a banking organization within the meaning of the New York Banking Law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code, and a clearing agency registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds securities that its participants ("Direct Participants") deposit with DTC. DTC also facilitates the settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in Direct Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc., and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants" and, together with Direct Participants, "Participants"). The rules applicable to DTC and its Participants are on file with the Securities and Exchange Commission.

Purchases of Series 2001 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2001 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2001 Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2001 Bonds are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2001 Bonds, except in the event that use of the book-entry system for the Series 2001 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2001 Bonds deposited by Participants with DTC and their registration in the name of Cede & Co. or other nominee of DTC effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2001 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2001 Bonds are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. If less than all of the Bonds within a maturity of a Series of the Series 2001 Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed.

Neither DTC nor any nominee will consent or vote with respect to Series 2001 Bonds. Under its usual procedures, DTC mails an omnibus proxy (the "Omnibus Proxy") to the City and County as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2001 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, redemption premium, if any, and interest payments on the Series 2001 Bonds will be made to DTC or its nominee. DTC's practice is to credit Direct Participants' accounts on the payable date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the payable date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in street name, and will be the responsibility of such Participant and not of DTC, the Paying Agent or the City and County, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, redemption premium, if any, and interest to DTC is the responsibility of the City and County

or the Paying Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

The City and County and the Paying Agent may treat DTC (or its nominee) as the sole and exclusive registered owner of the Series 2001 Bonds for the purpose of payment of the principal and redemption premium, if any, of, or interest on, the Series 2001 Bonds, giving any notice permitted or required to be given to registered owners under the First Resolution, registering the transfer of the Series 2001 Bonds, or other action to be taken by registered owners and for all other purposes whatsoever. The City and County and the Paying Agent shall not have any responsibility or obligation to any Participant, any person claiming a beneficial ownership interest in the Series 2001 Bonds under or through DTC or any Participant, or any other person which is not shown on the registration books of the City and County (kept by the Paying Agent) as being a registered owner, with respect to the accuracy of any records maintained by DTC or any Participant; the payment by DTC or any Participant of any amount in respect of the principal, redemption premium, if any, or interest on the Series 2001 Bonds; any notice which is permitted or required to be given to registered owners thereunder or under the conditions to transfers or exchanges adopted by the City and County; or other action taken by DTC as registered owner. Interest, redemption premium, if any, and principal will be paid by the Paying Agent to DTC, or its nominee. Disbursement of such payments to the Participants is the responsibility of DTC and disbursement of such payments to the Beneficial Owners is the responsibility of the Participants or the Indirect Participants.

For every transfer and exchange of beneficial ownership of any of the Series 2001 Bonds, a Beneficial Owner may be charged a sum sufficient to cover any tax, fee or other governmental charge that may be imposed in relation thereto.

DTC may discontinue providing its service with respect to the Series 2001 Bonds at any time by giving notice to the City and County and discharging its responsibilities with respect thereto under applicable law, or the City and County may terminate its participation in the system of book-entry transfer through DTC at any time by giving notice to DTC. In either event, the City and County may retain another securities depository for the Series 2001 Bonds or may direct the Paying Agent to deliver bond certificates in accordance with instructions from DTC or its successor. If the City and County directs the Paying Agent to deliver such bond certificates, such Series 2001 Bonds may thereafter be exchanged for an equal aggregate principal amount of Series 2001 Bonds in any other authorized denominations and of the same maturity as set forth in the First Resolution, upon surrender thereof at the principal corporate trust office of the Paying Agent, who will then be responsible for maintaining the registration books of the City and County.

Unless otherwise noted, certain of the information contained in the preceding paragraphs of this subsection "Book-Entry Only System" has been extracted from information provided by DTC. Neither the City and County, the Paying Agent nor the Underwriters make any representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

Neither the City and County nor the Paying Agent will have any responsibility or obligations to such DTC Participants, Indirect Participants, or the persons for whom they act as nominees with respect to the payments to or the providing of notice for such DTC Participants, Indirect Participants, or the Beneficial Owners. Payments made to DTC or its nominee shall satisfy the City and County's obligation under the First Resolution to the extent of such payments.

So long as Cede & Co. is the registered owner of the Series 2001 Bonds, as nominee for DTC, references herein to the Bondholders or registered owners of the Series 2001 Bonds (other than under the captions "TAX MATTERS" and "CONTINUING DISCLOSURE" herein) shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Series 2001 Bonds.

SECURITY FOR THE BONDS

General

The Bonds issued under and pursuant to the First Resolution, including the Series 2001 Bonds, are limited special obligations of the City and County. Pursuant to the First Resolution, there has been pledged, as security for the payment of the debt service on the Bonds, proceeds of the Bonds held or set aside under the First Resolution, the Net Revenues, and all Funds and Accounts established by the First Resolution other than the Rebate Account, the Subordinate Obligation Account, and the Reimbursable Obligation Account and in certain instances pursuant to the First Resolution, the Common Reserve Account or Separate Series Reserve Accounts. The Bonds are equally and ratably payable and secured under the First Resolution except that the City and County has reserved the right under the First Resolution to afford a particular Series of Bonds or particular Bonds additional or different security through a Support Facility, escrow funds, or the establishment of separate funds and accounts with respect to a particular Series of Bonds funded from sources other than the Net Revenues.

Under the First Resolution, Net Revenues means, with respect to any period, the Revenues during such period less amounts required to pay Operation and Maintenance Expenses. Revenues means the moneys, including any moneys collected from the City and County or any department thereof other than the Department, derived by the Department from the rates, rentals, fees and charges prescribed for the use and services of, and the facilities and commodities furnished by, the Wastewater System. Revenues include (i) all income, receipts, profits, and other moneys derived from the furnishing or supplying of the services, facilities and commodities through the Wastewater System; (ii) all income from investments of moneys held under the First Resolution except the Rebate Account, the Subordinate Obligation Account or the Reimbursable Obligation Account; (iii) all payments made by Counterparties pursuant to Interest Rate Exchange Agreements; and (iv) moneys and Investment Securities transferred from the Rate Stabilization Account to the Sewer Fund within ninety (90) days following the end of a Fiscal Year. Certain items do not constitute Revenues under the First Resolution, including certain deposits subject to refund, certain contributions in-aid-of construction and assessment, impact and other similar fees imposed and collected by the Department, income, fees, charges, receipts, profits or other moneys derived by the Department from the ownership or operation of any separate utility system, and certain gifts, grants and donations, moneys and Investment Securities transferred from the Sewer Fund to the Rate Stabilization Account within ninety (90) days following the end of a Fiscal Year, or Wastewater System Facility Charges.

The pledge of the Net Revenues for the security and payment of the Bonds under the First Resolution is superior to the pledge and security for Subordinate Obligations and Reimbursable Obligations authorized to be issued pursuant to the First Resolution. "Subordinate Obligations" are any obligations of the City and County payable from the Net Revenues, other than the Bonds and the Reimbursable Obligations, issued in compliance with the provisions of the First Resolution. "Reimbursable Obligations" are general obligation bonds payable from moneys in the City and County's general fund, subject to reimbursement from the Net Revenues. As of June 1, 2001, \$358,298,461 principal amount of Subordinate Obligations and Reimbursable Obligations were outstanding.

The Series 2001 Bonds will constitute Bonds under the First Resolution. The Series 2001 Bonds are the second Series of Bonds to be issued under the First Resolution. The City and County expects to issue additional Bonds under the First Resolution on a parity with the Series 2001 Bonds.

The Bonds are not a general or moral obligation of the State of Hawaii or any political subdivision thereof, including the City and County, and the faith and credit of the State of Hawaii or any political subdivision thereof, including the City and County, are not pledged to the payment of the principal of, premium, if any, or interest on the Bonds, and no holder of the Bonds shall have the right to compel the exercise of the taxing power of the State of Hawaii or any political subdivision thereof, including the City and County, in connection with any default with respect to the Bonds.

Funds and Accounts

The various funds and accounts established under or pledged by the First Resolution, the flow of Revenues through such funds and accounts, the rights and remedies of Bondholders under the First Resolution and other related matters are summarized in Appendix C, "Summary of Certain Provisions of the First Resolution."

The City and County has established the Sewer Fund by ordinance. Revenues are deposited in the Sewer Fund. The First Resolution establishes in the Sewer Fund a Debt Service Account, a Rate Stabilization Account, a Renewal and Replacement Account and a Wastewater General Account, all of which are pledged as security for the payment of debt service on all Bonds subject to the terms and provisions of and the exceptions provided in the First Resolution. The First Resolution also establishes a Common Reserve Account in the Sewer Fund and permits the establishment in the Sewer Fund of one or more Separate Series Reserve Accounts. The Common Reserve Account is pledged as additional security for the payment of debt service on the Bonds of such Series designated by the City and County to be entitled to the benefit of the Common Reserve Account. Each Separate Series Reserve Account is pledged as additional security for the payment of debt service on the Bonds of such individual Series designated by the City and County to be entitled to the benefit of such Separate Series Reserve Account.

Debt service on and redemption price of Bonds are payable from the Debt Service Account in the Sewer Fund. In the event of a deficiency in the Debt Service Account, debt service on and redemption price of particular Bonds are payable from the Common Reserve Account or the Separate Series Reserve Accounts, as applicable, but only if such Bonds are entitled to the benefit of such reserve accounts.

Moneys deposited and retained in the Sewer Fund may be maintained in an amount which is reasonable and necessary for working capital and reserves. The Rate Stabilization Account is to be used to stabilize the rates and charges of the Wastewater System. The Rate Stabilization Account is to be funded (i) from the Net Revenues but only after paying the Operation and Maintenance Expenses and after transferring required amounts to other funds and accounts as provided in the First Resolution, and (ii) from transfers from the Wastewater General Account. The Renewal and Replacement Account is to be used to pay the costs of improvements to or reconstruction of the Wastewater System, repairs, major or extraordinary repairs and renewals or replacements of the Wastewater System and under certain conditions, as set forth in the First Resolution, to meet deficiencies in the Debt Service Account, the Common Reserve Account, Separate Series Reserve Accounts, if any, the Subordinate Obligation Account and the Reimbursable Obligation Account, and will be maintained in an amount provided for in the Annual Budget. The Wastewater General Account may be used for any lawful purpose of the City and County, including funding of the Rate Stabilization Account, and under certain conditions, may be used to meet deficiencies in the Sewer Fund, the Common Reserve Account, Separate Series Reserve Accounts, if any, the Renewal and Replacement Account, the Rebate Account, the Subordinate Obligation Account and the Reimbursable Obligation Account.

The First Resolution also establishes in the Sewer Fund a Rebate Account, a Subordinate Obligation Account and a Reimbursable Obligation Account. Such accounts are not pledged as security for the Series 2001 Bonds, or any other Bonds. The funds in the Subordinate Obligation Account are to be used to pay debt service on and redemption price of Subordinate Obligations, provide necessary debt service reserves and other reserves and pay other costs related to Subordinate Obligations. The funds in the Reimbursable Obligation Account are to be used to pay debt service on and redemption price of Reimbursable Obligations. The funds in the Rebate Account are to be used to pay required rebates to the United States Treasury Department incurred in respect of the Bonds.

The First Resolution also establishes in the Sewer Fund the Wastewater System Facility Charge Account. Wastewater System Facility Charges collected by the Department are deposited in the Wastewater System Facility Charge Account. The Wastewater System Facility Charge Account is pledged under the First Resolution as security for the payment of debt service on and redemption price of the Bonds. However, if any amounts are used to pay debt service on or redemption price of the Bonds, the Wastewater System Facility Charge Account must be reimbursed from the Net Revenues with the priority set forth in the First Resolution. The Wastewater System Facility Charges are not considered to be Revenues under the First Resolution.

The City and County has also established by ordinance the Improvement Fund. The First Resolution establishes in the Improvement Fund an Improvement Account and permits the establishment within the Improvement Account of one or more Series Improvements Subaccounts and one or more Series Improvement Interest Subaccounts. Proceeds of Bonds issued under the First Resolution are to be deposited in the Improvement Account or a Series Improvement Subaccount pending application to pay the Costs of Improvements. Proceeds of Bonds issued under the First Resolution which are to be used to pay capitalized interest on the Bonds of a Series during the period of construction of an Improvement and for six months thereafter must be deposited in a Series Improvement Interest Subaccount. The Improvement Account, each Series Improvement Subaccount and each

Series Improvement Interest Subaccount (but not the Improvement Fund) are pledged under the First Resolution as security for the payment of debt service on and redemption price of the Bonds.

Common Reserve Account and Separate Series Reserve Accounts

Common Reserve Account. The First Resolution establishes a Common Reserve Account. Under the First Resolution, the City and County may designate one or more Series of Bonds to be entitled to the benefit of the Common Reserve Account. The Series 2001 Bonds are entitled to the benefit of the Common Reserve Account. The moneys held in the Common Reserve Account are to be used to pay debt service on the Bonds entitled to the benefit of the Common Reserve Account in the event of a deficiency in the Debt Service Account to pay such debt service. The Common Reserve Account is to be maintained in an amount not less than the Common Reserve Account Requirement. The Common Reserve Account Requirement is an amount that is equal to the greatest amount of Aggregate Debt Service for the then current or any future Fiscal Year on all Outstanding Bonds entitled to the benefit of the Common Reserve Account; provided, however, that if upon the issuance of a Series of Bonds entitled to the benefit of the Common Reserve Account, such amount would require moneys credited to the Common Reserve Account from the proceeds of such Bonds in an amount in excess of the maximum amount permitted under the Code, the Common Reserve Account Requirement will then be the Common Reserve Account Requirement immediately preceding the issuance of such Bonds and the maximum amount permitted under the Code to be deposited from the proceeds of such Bonds, as certified by an Authorized Officer. The First Resolution provides that the Aggregate Debt Service is to be computed with respect to each Variable Rate Bond entitled to the benefit of the Common Reserve Account by using the Assumed Long-Term Fixed Rate.

In lieu of cash or securities, the First Resolution permits the Department to satisfy the Common Reserve Account Requirement in part or in whole by causing to be deposited into the Common Reserve Account a Support Facility (which may be an irrevocable letter of credit, surety bond, loan agreement, standby bond purchase agreement, or other agreement facility or insurance or guaranty agreement issued by a bank or banks, or other financial institution or institutions, or any combination of the foregoing) in an amount equal to the difference between the Common Reserve Account Requirement and the sums then on deposit in the Common Reserve Account, if any. The Support Facility must be payable (upon the giving of notice as required thereunder) on or before any interest payment date on which moneys will be required to be withdrawn from the Common Reserve Account and applied to the payment of principal or redemption price of or interest on any Bonds and such withdrawal cannot be met by amounts on deposit in the Common Reserve Account or provided from any other available Fund under the First Resolution. Any Support Facility deposited in the Common Reserve Account or the long-term debt of the issuer of any Support Facility deposited in the Common Reserve Account must, in each case, be rated in the highest rating category by each Rating Agency and, if rated by A.M. Best & Company, must also be rated in the highest rating category by A.M. Best & Company. In the event any Support Facility deposited in the Common Reserve Account or the long-term debt of the issuer of any Support Facility deposited in the Common Reserve Account falls below the second highest rating category of each Rating Agency, and A.M. Best & Company, if rated by A.M. Best & Company, the City and County must, within 120 days, obtain a new Support Facility which, or which the long-term debt of the issuer of such new Support Facility, is rated in the highest rating category of such rating agencies; provided, however, that if the new Support Facility is not obtained within 120 days, the City and County must deposit in the Common Reserve Account Net Revenues in the amount provided in the First Resolution. If a disbursement is made pursuant to a Support Facility deposited in the Common Reserve Account, the City and County must: first, reinstate the full amount of such Support Facility; and second, if necessary, deposit Net Revenues in the Common Reserve Account in the amount of the disbursement made under such Support Facility, in either case such that the amount in the Common Reserve Account will equal the Common Reserve Account Requirement within a period of time not longer than would be required to restore the Common Reserve Account by application of moneys in the Sewer Fund as required by the First Resolution. The City and County may at any time deposit cash or Investment Securities as replacement for one or more Support Facilities.

Separate Series Reserve Accounts. The First Resolution permits the establishment of a Separate Series Reserve Account to provide additional security for the Bonds of a Series which is not entitled to the benefit of the Common Reserve Account. In the event of a deficiency in the Debt Service Account to pay debt service on the Bonds of a Series entitled to the benefit of a Separate Series Reserve Account, the amounts held in such Separate Series Reserve Account are to be used exclusively to pay such debt service. The amount to be maintained in any such Separate Series Reserve Account for a Series of Bonds is to be determined at the time such Bonds are

authorized or sold. The credit quality of a Support Facility to be deposited in any Separate Series Reserve Account for a Series of Bonds is also to be determined at the time such Bonds are authorized or sold. No Separate Series Reserve Account has been established for the Series 2001 Bonds.

Transfers to Reserve Accounts. The First Resolution requires that in each month, after paying and setting aside an amount sufficient to pay the Operation and Maintenance Expenses for such month, and after transferring to the Debt Service Account an amount sufficient to pay debt service on the Bonds to accrue in such month, moneys in the Sewer Fund are to be transferred pro rata to the Common Reserve Account and each Separate Series Reserve Account in such amounts as are required so that the balances in the Common Reserve Account and each Separate Series Reserve Account are equal to their respective requirements, or at the election of the Department; so that at least one-sixth of any deficiency in the Common Reserve Account or each Separate Series Reserve Account is eliminated.

Rate Covenant

The City and County is required by the First Resolution, among other things, to fix, charge and collect such rates and other charges as shall be required in order that in each Fiscal Year the Net Revenues shall not be less than the Net Revenue Requirement for such Fiscal Year. The Net Revenue Requirement means with respect to any Fiscal Year or any period, an amount equal to the greater of: (i) the sum of (a) the Aggregate Debt Service in such Fiscal Year or such period and (b) the Required Deposits for such Fiscal Year or such period; or (ii) 1.20 times the Aggregate Debt Service in such Fiscal Year plus 1.00 times the aggregate Support Facility Reimbursement Obligations outstanding as of the end of such Fiscal Year. Net Revenues means, with respect to any period, the Revenues during such period less amounts required to pay Operation and Maintenance Expenses. Aggregate Debt Service means, for any period and as of any date of computation, the sum of the amounts of Debt Service for such period with respect to all Series of Bonds. Support Facility Reimbursement Obligations are obligations of the City and County to directly reimburse the Support Facility Provider of a Support Facility for amounts paid thereunder or a Counterparty under an Interest Rate Exchange Agreement for amounts paid, whether or not such obligation to reimburse is evidenced by a promissory note or similar instrument.

Failure by the City and County to comply with the foregoing rate covenant in any Fiscal Year will not constitute an Event of Default under the First Resolution so long as the provisions of the First Resolution described below are complied with. Prior to the end of each Fiscal Year the Director of Environmental Services or the Director of Budget and Fiscal Services if requested by the Director of Environmental Services is required by the First Resolution to complete a review of the financial condition of the Department for the purpose of estimating whether the Net Revenues for such Fiscal Year and for the next succeeding Fiscal Year will be sufficient to comply with the foregoing rate covenant and to make a written certification with respect to compliance or noncompliance. Such review is to take into consideration the completion of any uncompleted Improvements and the issuance of future Series of Bonds if necessary to finance the completion of such Improvements. Such written certification is to set forth a reasonably detailed statement of the actual and estimated Revenues, Operation and Maintenance Expenses, Aggregate Debt Service, and any other estimates or assumptions upon which such determination was based, shall be filed with the City Clerk on or before July 1 in each year. If it is determined in such written certification that the Revenues may not be so sufficient, the Director of Environmental Services or the Director of Budget and Fiscal Services if requested by the Director of Environmental Services must forthwith make a study for the purpose of determining a schedule of fees, rates and charges which, in the opinion of the Director of Environmental Services or the Director of Budget and Fiscal Services, will cause sufficient Revenues to be collected in the following Fiscal Year to comply with such rate covenant, or the Director of Environmental Services or the Director of Budget and Fiscal Services may elect to cause the Consulting Engineer to make such a study and render such certification. The City Council, as promptly as practicable but no later than 120 days following such determination by the Director of Environmental Services or the Director of Budget and Fiscal Services, or receipt of the Consulting Engineer's recommendation, is required to adopt and place in effect a schedule of fees, rates and charges as so determined or recommended. See "CERTAIN OPERATING AND OTHER STATISTICS - Summary of Current Sewer Rate Ordinance" for current sewer charges, "PROJECTED REVENUES, EXPENSES AND COVERAGES" and Appendix B, "Engineer's Report" for a discussion of the Department's projected rates, revenues and expenses, and "THE CITY AND COUNTY AND THE DEPARTMENT - Purpose and Powers" for a discussion of the rate making powers of the City Council.

Additional Bonds and Refunding Bonds

The First Resolution permits the issuance of additional Series of Bonds (exclusive of refunding Bonds) on a parity with the Bonds then Outstanding ("Additional Bonds") for any lawful use or purpose relating to the Wastewater System, including, without limitation, payment of all or a portion of the Costs of Improvements but only upon compliance as to each such Series with the conditions set forth in the First Resolution. The Series 2001 Bonds are being issued as Additional Bonds under the First Resolution and their issuance is subject to compliance with such conditions, which include delivery to the Director of Budget and Fiscal Services of the following documents or moneys or securities:

1. A written certificate of the City and County stating the amount required to be in the Common Reserve Account after issuance of the Bonds then to be issued and that the amounts deposited will not be less than the Common Reserve Account Requirement.

2. A written certificate of the City and County stating the amount required to be in the Separate Series Reserve Account established for the Bonds of such Series after issuance of the Bonds then to be issued and that the amounts deposited will not be less than the Separate Series Reserve Account Requirement for the Bonds of such Series.

3. Either:

- (I) a written certificate of the City and County based: (i) on audited figures or (ii) to the extent audited figures are not available, on figures taken by an independent certified public accountant from the Department's books and records, showing that the Net Revenues for: (a) the most recent Fiscal Year, or (b) any consecutive twelve (12) month period out of twenty-four (24) months immediately preceding the month in which such Bonds are issued were not less than the greater of: (x) the sum of (1) the maximum Aggregate Debt Service on all Bonds then Outstanding and on the proposed Series of Bonds in any Fiscal Year and the twelve (12) month period selected and (2) the Required Deposits for such Fiscal Year or the twelve (12) month period selected; and (y) 1.20 times the maximum Aggregate Debt Service on all Bonds then Outstanding and on the proposed Series of Bonds in any Fiscal Year and the twelve (12) month period selected, plus 1.00 times the aggregate Support Facility Reimbursement Obligations outstanding as of the date of the written certificate of the City and County; or

- (II) a written certificate of the City and County or Certificate of the Consulting Engineer that the Net Revenues to be derived in each of the five (5) Fiscal Years following the earlier of: (i) the end of the period during which interest is capitalized or, if no interest is to be capitalized, the Fiscal Year in which the proposed Series of Bonds are issued, and (ii) the date on which substantially all Improvements to be financed with the proceeds of the proposed Series of Bonds are expected to commence operations, or, if the proceeds of such Series of Bonds will not be used to fund the Costs of Improvements, the Fiscal Year in which the proposed Series of Bonds are issued, are estimated to be not less than the greater of: (x) the sum of (1) the maximum Aggregate Debt Service on all Bonds then Outstanding and on the proposed Series of Bonds in any such Fiscal Year, and (2) the Required Deposits for any such Fiscal Year; and (y) 1.20 times the maximum Aggregate Debt Service on all Bonds then Outstanding and on the proposed Series of Bonds in any such Fiscal Year, plus 1.00 times the aggregate Support Facility Reimbursement Obligations outstanding as of the date of such written certificate of the City and County or certificate of the Consulting Engineer.

In determining Net Revenues for purposes of the certificates described above, the City and County or the Consulting Engineer, as the case may be, is permitted, and in certain instances is required, to make certain adjustments as provided in the First Resolution. In addition, the First Resolution requires that certain other adjustments to Net Revenues derived from Debt Service on Variable Rate Bonds and debt service on Bond Anticipation Notes and short-term Subordinate Obligations and Reimbursable Obligations be made for purposes of the written certificates described above. See Appendix C, "Summary of Certain Provisions of the First Resolution."

Bonds may be issued as variable rate bonds, fixed rate bonds, bonds providing for the right of the owner thereof to present the Bond for redemption or purchase prior to maturity, zero interest rate or deep discount bonds,

bonds providing for the compounding of interest, or any combination thereof. Bonds may be issued or outstanding from time to time with or without credit enhancement provisions. See Appendix C, "Summary of Certain Provisions of the First Resolution."

The First Resolution also permits the issuance of Bonds ("Refunding Bonds") on a parity with the Bonds then Outstanding to refund all or any part of: (i) a Series of Outstanding Bonds; (ii) Subordinate Obligations; or (iii) Reimbursable Obligations. Refunding Bonds may only be issued by the City and County upon satisfaction of certain conditions set forth in the First Resolution.

A more detailed description of the requirements relating to the issuance of Additional Bonds or Refunding Bonds is set forth in Appendix C under "Additional Bonds and Refunding Bonds."

The First Resolution also permits the issuance of notes in anticipation of a Series of Bonds if the City and County has theretofore authorized the issuance of such Bonds. The interest on such notes (and any renewal thereof) shall be payable from the proceeds of such notes or other notes or from the proceeds of the sale of the Bonds in anticipation of which such notes are issued. A more detailed description of the provisions for security for payment of such notes and other requirements relating to the issuance of notes is set forth in Appendix C under "Bond Anticipation Notes."

BOND INSURANCE

The following information has been furnished by Ambac Assurance Corporation ("Ambac Assurance") for use in this Official Statement. Neither the City and County nor any Underwriter guarantees or makes any representation as to the accuracy or completeness thereof. Reference is made to Appendix F for a specimen of the policy which has been provided for use herein. As used in this section, the term "Obligations" means the Series 2001 Bonds, and the term "Obligor" means the City and County.

Payment Pursuant to Financial Guaranty Insurance Policy

Ambac Assurance has made a commitment to issue a financial guaranty insurance policy (the "Financial Guaranty Insurance Policy") relating to the Obligations effective as of the date of issuance of the Obligations. Under the terms of the Financial Guaranty Insurance Policy, Ambac Assurance will pay to The Bank of New York, in New York, New York or any successor thereto (the "Insurance Trustee") that portion of the principal of and interest on the Obligations which shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Obligor (as such terms are defined in the Financial Guaranty Insurance Policy). Ambac Assurance will make such payments to the Insurance Trustee on the later of the date on which such principal and interest becomes Due for Payment or within one business day following the date on which Ambac Assurance shall have received notice of Nonpayment from the Trustee/Paying Agent. The insurance will extend for the term of the Obligations and, once issued, cannot be canceled by Ambac Assurance.

The Financial Guaranty Insurance Policy will insure payment only on stated maturity dates and on mandatory sinking fund installment dates, in the case of principal, and on stated dates for payment, in the case of interest. If the Obligations become subject to mandatory redemption and insufficient funds are available for redemption of all outstanding Obligations, Ambac Assurance will remain obligated to pay principal of and interest on outstanding Obligations on the originally scheduled interest and principal payment dates including mandatory sinking fund redemption dates. In the event of any acceleration of the principal of the Obligations, the insured payments will be made at such times and in such amounts as would have been made had there not been an acceleration.

In the event the Paying Agent has notice that any payment of principal of or interest on an Obligation which has become Due for Payment and which is made to a Holder by or on behalf of the Obligor has been deemed a preferential transfer and there-tofore recovered from its registered owner pursuant to the United States Bankruptcy Code in accordance with a final, nonappealable order of a court of competent jurisdiction, such registered owner will be entitled to payment from Ambac Assurance to the extent of such recovery if sufficient funds are not otherwise available.

The Financial Guaranty Insurance Policy does not insure any risk other than Nonpayment, as defined in the Policy. Specifically, the Financial Guaranty Insurance Policy does not cover:

1. payment on acceleration, as a result of a call for redemption (other than mandatory sinking fund redemption) or as a result of any other advancement of maturity.
2. payment of any redemption, prepayment or acceleration premium.
3. nonpayment of principal or interest caused by the insolvency or negligence of any Trustee or Paying Agent, if any.

If it becomes necessary to call upon the Financial Guaranty Insurance Policy, payment of principal requires surrender of Obligations to the Insurance Trustee together with an appropriate instrument of assignment so as to permit ownership of such Obligations to be registered in the name of Ambac Assurance to the extent of the payment under the Financial Guaranty Insurance Policy. Payment of interest pursuant to the Financial Guaranty Insurance Policy requires proof of Holder entitlement to interest payments and an appropriate assignment of the Holder's right to payment to Ambac Assurance.

Upon payment of the insurance benefits, Ambac Assurance will become the owner of the Obligation, appurtenant coupon, if any, or right to payment of principal or interest on such Obligation and will be fully subrogated to the surrendering Holder's rights to payment.

Ambac Assurance Corporation

Ambac Assurance Corporation ("Ambac Assurance") is a Wisconsin-domiciled stock insurance corporation regulated by the Office of the Commissioner of Insurance of the State of Wisconsin and licensed to do business in 50 states, the District of Columbia, the Territory of Guam and the Commonwealth of Puerto Rico, with admitted assets of approximately \$4,568,000,000 (unaudited) and statutory capital of approximately \$2,787,000,000 (unaudited) as of March 31, 2001. Statutory capital consists of Ambac Assurance's policyholders' surplus and statutory contingency reserve. Standard & Poor's Credit Markets Services, a Division of The McGraw-Hill Companies, Moody's Investors Service and Fitch, Inc. have each assigned a triple-A financial strength rating to Ambac Assurance.

Ambac Assurance has obtained a ruling from the Internal Revenue Service to the effect that the insuring of an obligation by Ambac Assurance will not affect the treatment for federal income tax purposes of interest on such obligation and that insurance proceeds representing maturing interest paid by Ambac Assurance under policy provisions substantially identical to those contained in its financial guaranty insurance policy shall be treated for federal income tax purposes in the same manner as if such payments were made by the Obligor of the Obligations.

Ambac Assurance makes no representation regarding the Obligations or the advisability of investing in the Obligations and makes no representation regarding, nor has it participated in the preparation of, the Official Statement other than the information supplied by Ambac Assurance and presented under the heading "BOND INSURANCE".

Available Information

The parent company of Ambac Assurance, Ambac Financial Group, Inc. (the "Company"), is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information may be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 and at the Commission's regional offices at 7 World Trade Center, New York, New York 10048 and Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of such material can be obtained from the public reference section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. In addition, the aforementioned material may also be inspected at the

offices of the New York Stock Exchange, Inc. (the "NYSE") at 20 Broad Street, New York, New York 10005. The Company's Common Stock is listed on the NYSE.

Copies of Ambac Assurance's financial statements prepared in accordance with statutory accounting standards are available from Ambac Assurance. The address of Ambac Assurance's administrative offices and its telephone number are One State Street Plaza, 19th Floor, New York, New York 10004 and (212) 668-0340.

Incorporation of Certain Documents by Reference

The following documents filed by the Company with the Commission (File No. 1-10777) are incorporated by reference in this Official Statement:

1. The Company's Current Report on Form 8-K dated January 24, 2001 and filed on January 24, 2001;
2. The Company's Current Report on Form 8-K dated March 19, 2001 and filed on March 19, 2001;
3. The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2000 and filed on March 28, 2001; and
4. The Company's Quarterly Report on Form 10-Q for the fiscal quarterly period ended March 31, 2001 and filed on May 15, 2001.

All documents subsequently filed by the Company pursuant to the requirements of the Exchange Act after the date of this Official Statement will be available for inspection in the same manner as described above in "Available Information".

REVENUE BOND DEBT SERVICE REQUIREMENTS

Years Ending June 30⁽¹⁾

Year	Principal Series 2001 Bonds	Interest Series 2001 Bonds ⁽²⁾	Total Series 2001 Debt Service	Debt Service on Outstanding Senior Bonds	Total Senior Debt Service	Debt Service on Outstanding Junior Bonds	Total Debt Service
2002		\$3,263,157	\$3,263,157	\$3,563,306	\$6,826,463	\$11,460,673	\$18,287,135
2003		7,076,725	7,076,725	3,562,106	10,638,831	11,460,673	22,099,504
2004		7,076,725	7,076,725	3,564,206	10,640,931	11,460,673	22,101,604
2005		7,076,725	7,076,725	3,564,506	10,641,231	11,460,673	22,101,904
2006	\$2,365,000	7,017,600	9,382,600	3,563,006	12,945,606	11,460,673	24,406,279
2007	2,475,000	6,908,975	9,383,975	3,564,606	12,948,581	11,460,673	24,409,254
2008	2,590,000	6,794,725	9,384,725	3,564,206	12,948,931	11,460,673	24,409,604
2009	2,725,000	6,661,850	9,386,850	3,560,972	12,947,822	12,341,773	25,289,594
2010	2,860,000	6,522,225	9,382,225	3,563,438	12,945,663	14,148,691	27,094,354
2011	3,010,000	6,375,475	9,385,475	3,561,688	12,947,163	16,898,704	29,845,866
2012	3,170,000	6,213,050	9,383,050	3,561,313	12,944,363	21,331,768	34,276,130
2013	3,350,000	6,033,750	9,383,750	3,562,063	12,945,813	22,905,356	35,851,169
2014	3,540,000	5,844,275	9,384,275	3,560,944	12,945,219	22,906,656	35,851,875
2015	3,740,000	5,644,075	9,384,075	3,562,938	12,947,013	22,911,156	35,858,169
2016	3,950,000	5,432,600	9,382,600	3,560,894	12,943,494	22,912,938	35,856,431
2017	4,175,000	5,209,163	9,384,163	3,559,694	12,943,856	22,916,081	35,859,938
2018	4,410,000	4,973,075	9,383,075	3,563,981	12,947,056	22,919,538	35,866,594
2019	4,660,000	4,723,650	9,383,650	3,563,519	12,947,169	22,922,256	35,869,425
2020	4,920,000	4,466,350	9,386,350	3,563,188	12,949,538	22,918,925	35,868,463
2021	5,185,000	4,201,094	9,386,094	3,562,750	12,948,844	22,922,800	35,871,644
2022	5,465,000	3,921,531	9,386,531	3,561,969	12,948,500	22,919,675	35,868,175
2023	5,760,000	3,626,875	9,386,875	3,560,606	12,947,481	22,921,175	35,868,656
2024	6,070,000	3,316,338	9,386,338	3,563,306	12,949,644	22,920,175	35,869,819
2025	6,390,000	2,993,256	9,383,256	3,559,831	12,943,088	22,922,488	35,865,575
2026	6,725,000	2,657,184	9,382,184	3,559,944	12,942,128	22,920,513	35,862,641
2027	7,080,000	2,303,431	9,383,431	3,563,169	12,946,600	22,918,938	35,865,538
2028	7,455,000	1,930,972	9,385,972	3,564,150	12,950,122	22,920,850	35,870,972
2029	7,845,000	1,538,909	9,383,909	3,562,650	12,946,559	22,919,338	35,865,897
2030	8,260,000	1,126,219	9,386,219		9,386,219		9,386,219
2031	8,695,000	691,747	9,386,747		9,386,747		9,386,747
2032	9,150,000	234,469	9,384,469		9,384,469		9,384,469

(1) Based on payments, not on accruals.

(2) Includes accrued interest on Series 2001 Bonds from July 15, 2001

THE CITY AND COUNTY AND THE DEPARTMENT

Purpose and Powers

The City and County. The City and County of Honolulu includes the entire island of Oahu and a number of outlying islands. Of the eight major islands that constitute the State of Hawaii, Oahu, with an area of 593 square miles, is smaller than the Islands of Hawaii and Maui but larger than the Islands of Kauai, Molokai, Lanai, Niihau and Kahoolawe. With slightly less than a tenth of the land area in the entire State, Oahu contains nearly three-fourths of the State's resident population. Based on the 2000 U.S. Census, the resident population of the State was 1,121,537, and that of Oahu was 845,157, approximately 72% of the total State population. Honolulu is the seat of the State Government and is the State's trade, finance, communication, and transportation center. Most Federal establishments and personnel (both civilian and military), manufacturing, major educational and scientific, and significant agricultural activities are located on Oahu.

City Council and Mayor. The City Council (the "City Council") is the governing body of the City and County and it consists of nine members. All members are elected from nine districts to serve four year terms with a limitation of two consecutive full terms. Pursuant to the City Charter of the City and County, the City Council has the power, among other things: (i) to exercise the legislative power of the City, (ii) to enact operating and capital budget ordinances, (iii) with certain exceptions, to fix fees and charges for services rendered by the City, and (iv) to authorize the issuance of revenue bonds for the purpose of initiating, constructing, acquiring, extending, replacing or otherwise improving any revenue-producing facility. The Mayor is the Chief Executive Officer of the City. The Mayor is elected to serve a four year term with a limitation of two consecutive full terms. The Mayor exercises direct supervision over all agencies specifically identified in the City Charter and, through the Managing Director, exercises supervision over all other executive agencies of the City.

Department of Environmental Services. The Department of Environmental Services was established on July 1, 1998, pursuant to a plan of reorganization which combined certain components of the Department of Wastewater Management, the department which previously administered the Wastewater System, with other administrative departments having compatible functions. The Department of Environmental Services, among other things, is charged with the responsibility to administer the planning, design and construction of wastewater facilities, oversee the operation and maintenance of sewer lines, treatment plants and pumping stations, monitor the collection, treatment and disposal of wastewater, provide chemical treatment and pumping of defective cesspools, provide solid waste processing, collection and disposal, promulgate rules and regulations as necessary to administer and enforce requirements established by law, and perform such other duties as may be required by law. The Department consists of four divisions: Environmental Quality, Treatment and Disposal, Collection System Maintenance and Refuse Collection and Disposal, plus an Office of Administrative Support.

Power to Fix and Collect Rates and Charges. By ordinance and resolution, the City Council requires that revenues of the Wastewater System be kept in the Sewer Fund and that the wastewater program shall be self-supporting. Consistent with such requirements, the Department is budgeted as a self-sustaining enterprise for the purpose of determining costs associated with providing wastewater services. Through the adoption of the annual operating and capital budgets, the revenue requirements and wastewater rates are reviewed to determine the adequacy of revenues to meet needs. Pursuant to the Act and the City Charter, the City Council has the power to impose, prescribe and collect rates, rentals, fees or charges for the use and services of, and the facilities furnished by, the Wastewater System so that the Wastewater System will be and remain self-sustaining. The rates, rentals, fees or charges imposed and prescribed are required to produce revenues which will be at least sufficient to pay debt service on all revenue bonds issued for the purposes of the Wastewater System, including the Bonds, and including reserves therefor, to pay the costs of operation, maintenance and repair of the Wastewater System, and to carry out the covenants of all resolutions authorizing the issuance of revenue bonds for the purposes of the Wastewater System, including the First Resolution and the Second Resolution. The rates and charges fixed and imposed by the City Council are not subject to approval by any federal or state regulatory bodies. Rates and charges are determined on the basis of a recommendation by the Director of Environmental Services and the Mayor, subject to approval by ordinance of the City Council. An ordinance requires three readings and a public hearing for enactment by the City Council.

Department Work Force

The Department employs approximately 590 persons in various managerial, clerical, engineering and operational positions in support of wastewater activities. This work force, with the exception of 9 excluded employees, is represented by one blue-collar, non-supervisory bargaining unit, one blue collar, supervisory bargaining unit, one white-collar, non-supervisory bargaining unit, one white-collar, supervisory bargaining unit, and one professional and scientific bargaining unit. All bargaining unit contracts are state-wide and apply to all State government and county government activities, and all are effective until June 30, 2003. All employees are covered by the Hawaii State Employees Retirement System.

Department Principal Officers

The principal officers of the Department of Environmental Services include the Director, Deputy Director and Executive Assistant.

The following are brief biographies of the Department's principal officers:

Timothy E. Steinberger, Acting Director/Deputy Director. Mr. Steinberger was appointed Acting Director/Deputy Director of the Department of Environmental Services in January 2001. He previously served as Chief of the Wastewater Planning Branch in the Department of Design and Construction from 1997 to 2000. Prior to that, he served as EPA programs manager for the Department from 1994 to 1997. He has a Bachelor of Science in Mechanical Engineering from the University of Maryland and a Master of Science in Mechanical Engineering from the University of Hawaii at Manoa. As a licensed professional engineer, he was in private practice before coming to the City.

Timothy A. Houghton, Executive Assistant. Mr. Houghton served as Executive Assistant for the Department of Wastewater Management from its creation on July 1, 1993, and continues in that role with the Department of Environmental Services. As Executive Assistant, among other things, Mr. Houghton is responsible for Department financial and personnel activities. Prior to that he worked on the Honolulu Rapid Transit Project and with the Department of Auditoriums. Mr. Houghton has a Bachelor of Arts degree from San Francisco State University and a Master of Science in Systems Management degree from the University of Southern California.

THE WASTEWATER SYSTEM

Introduction

The Wastewater System services approximately 130,000 separate accounts and a population of approximately 600,000, which is approximately 70% of the total population of the City and County. The service area covers nearly 500 square miles. The customer base includes the residential population, business and industries, and other users located in the service area. Of the 130,000 accounts, 123,000 are residential and provide 77.8% of the total revenue from sewer service charges. See "CERTAIN OPERATING AND OTHER STATISTICS." The average total volume of wastewater processed by the City and County's Wastewater System is 113.6 million gallons per day. A number of small private wastewater systems also serve some areas in the City and County. The average total volume of wastewater processed by all such private systems is 4.1 million gallons per day.

General Description of Existing Facilities

The Wastewater System serving the island of Oahu is divided into eight wastewater basins for planning purposes: Central Oahu, East Mamala Bay, Kailua/Kaneohe/Kahaluu, North Oahu East/West, Waianae, Waimanalo, and West Mamala Bay. Each basin is served by a wastewater treatment plant ("WWTP"). The function of each WWTP is to treat the wastewater by removing or reducing the levels of organic and inorganic materials contained in the wastewater to levels that satisfy federal and state permit requirements for the discharge of such wastewater into the ocean, streams, reservoirs or injection wells. In addition to treatment facilities, the Wastewater System includes collection, pumping and other related facilities.

A description of the wastewater basins and major facilities is as follows:

East Mamala Bay. The largest and the most densely populated basin is East Mamala Bay. Approximately 374,400 people reside in East Mamala Bay, representing approximately 44% of the resident population of the entire island. The basin is served by the Sand Island WWTP, a primary plant, and the largest treatment facility in terms of wastewater flow. The treatment plant has the capacity to process 82 million gallons per day ("MGD") of wastewater flow, and currently treats 67.6 MGD.

West Mamala Bay. West Mamala Bay is the second largest basin and includes Ewa, Central Oahu as far north as Mililani, and the Halawa to Pearl City area of the Primary Urban Center. The population of the basin area is approximately 240,000, or more than 28 percent of the estimated population of Oahu. The basin is served by the Honouliuli WWTP, which is the second largest treatment plant in the Wastewater System, with a primary treatment design capacity of 38 MGD and a secondary treatment design capacity of 13 MGD. It currently processes 26.8 MGD of wastewater flow. The secondary treated effluent is provided to a recycled water facility.

Kailua/Kaneohe/Kahaluu. The third largest basin includes the communities of Kailua, Kaneohe, and Kahaluu and surrounding areas in the eastern part of the island. The eastern portion of Oahu is also referred to as the Windward basin area. The basin area population is nearly 106,000, or approximately 13 percent of the island's population. The basin is served by the Kailua Regional WWTP, the third largest treatment plant in the Wastewater System. The Kailua WWTP has a design capacity of 15.25 MGD and currently treats about 13.0 MGD of wastewater flow.

North Oahu (East and West). The North Oahu area is largely unsewered. Small facilities existing are the Kahuku WWTP (0.4 MGD capacity, secondary) and the Pa'alaa Kai WWTP (0.14 MGD capacity, secondary).

Waianae. The Waianae basin serves the west coast of the island, which has a population of approximately 39,300. The Waianae WWTP has the capacity to process 5.2 MGD at a secondary level.

Central Oahu. Central Oahu, including military bases and the communities of Wahiawa and Whitmore Village, is served by the Wahiawa WWTP (2.5 MGD capacity, secondary).

Waimanalo. The Waimanalo basin is served by the Waimanalo WWTP with a capacity of 0.7 MGD. It is a secondary plant and serves the Waimanalo community, with a population of 9,200.

The Sand Island WWTP, the Honouliuli WWTP and the Kailua Regional WWTP are the three largest WWTPs. The remaining WWTPs provide treatment of wastewater to the rest of the island. Though the four basin areas including Central Oahu, North Oahu, Waianae, and Waimanalo comprise the majority of the geographical area of the island, the population density is much lower in comparison to the East and West Mamala Bay and the Kailua/Kaneohe/Kahaluu basin areas. The combined population of the four basin areas is less than 12 percent of the total population of Oahu. The total design capacity of the WWTPs in the 4 basin areas is nearly 9 MGD and the current wastewater flow is approximately 5.9 MGD. Two private wastewater systems provide collection and treatment for the communities of Hawaii Kai and Laie. The Hawaii Kai system has an average flow of 3.8 MGD, including flows from the City and County's Kuliouou WWPS, and the Laie system has an average flow of 0.3 MGD. The two systems combined process less than 4% of the average flow of the City and County's Wastewater System. The City and County has entered into an agreement to acquire the Laie wastewater system over the next four years.

For a more detailed description of the Wastewater System, see Appendix B, "Engineer's Report."

Environmental Compliance

The WWTPs and other facilities operated by the Department are governed by either National Pollutant Discharge Elimination System (NPDES) permits or State of Hawaii Department of Health Underground Injection Control permits. Since 1991, the United States Environmental Protection Agency ("EPA"), the State of Hawaii and several environmental groups have filed various legal and regulatory actions against the City and County alleging

violations of the federal Clean Water Act and the several NPDES and State of Hawaii permits held by the Department. The City and County has entered into settlements with respect to several of such actions. The consent decrees entered into by the City and County in connection with such settlements require the City and County, among other things, to rehabilitate and expand certain existing facilities, to implement pretreatment programs; efficient reuse and biosolids reuse, and to construct new facilities. The Department has undertaken the rehabilitation and expansion of existing facilities, the implementation of pretreatment programs, efficient reuse and biosolids reuse, and the construction of new facilities in the last several years for the purpose of complying with the existing consent decrees. The Department has developed the 2001-2005 Capital Improvement Program, the 2001-2010 Capital Improvement Program and the 1998-2017 Capital Improvement Program, in part, to comply with existing consent decrees and administrative orders.

The Consulting Engineer has concluded that, except for the Waimanalo WWTP, which is operated by the Department but is owned by the State of Hawaii, and the Sand Island WWTP, facilities of the Wastewater System are meeting current regulatory requirements and are operated and maintained in accordance with standard utility practices. However, the Consulting Engineer has also concluded that the collection and pumping facilities of the Wastewater System do not meet all of the current and anticipated federal and state regulatory requirements and will require additional capacity to serve projected growth in the service area. The Department has developed plans which will provide for anticipated requirements and established procedures.

See "CAPITAL IMPROVEMENT PROGRAM" and Appendix B, "Engineer's Report."

Projected Customer Growth

The resident population in Oahu, the area served by the Wastewater System, is projected to grow modestly through 2020. The actual and projected resident population, by basin area, for the years 1990 through 2020 is shown in the following tables. The majority of growth between the years 1990 and 2020 is expected to occur in East and West Mamala Bay. Of the total population growth projected to occur between 1990 and 2020, 94,000 or 59% is expected to take place in West Mamala Bay and over 54,000, or 34% , is expected to occur in East Mamala Bay. The tables show an estimated average annual population increase of 5,308 between 1990 and 2020, or roughly 0.5% annually.

Table 1

**Actual and Projected Resident Population
By Basin⁽¹⁾, Oahu, 1990-2020**

Basin	1990	2000	2005	2010	2015	2020
East Mamala Bay	380,157	374,366	385,303	402,731	421,828	434,250
West Mamala Bay	199,005	239,713	251,239	267,301	273,752	293,036
North Oahu (East/West) ⁽²⁾	29,992	31,094	31,331	31,372	34,325	34,924
Waianae	37,411	39,271	40,635	41,094	41,336	42,183
Central Oahu	44,540	45,252	44,996	44,716	44,546	44,231
Kailua/Kaneohe/Kahaluu	108,639	106,300	105,502	104,738	108,812	109,214
Waimanalo	<u>9,055</u>	<u>9,161</u>	<u>9,099</u>	<u>9,043</u>	<u>9,631</u>	<u>9,749</u>
Total	808,799	845,157	868,105	900,955	934,230	967,587

Notes:

- 1 Population from Planning Department. Military bases are included (City and County of Honolulu Planning Department, 2000; City and County of Honolulu)
 - 2 Includes population of Laie, which is currently served by a private sewer system operator, but which will be served by the City and County of Honolulu beginning in 2003.
- Source: City and County of Honolulu, Department of Environmental Services, City & County of Honolulu, Department of Planning and Permitting, 2001.

Table 2

**Actual and Projected Percentage Growth in Resident Population
By Basin, Oahu, 1990-2020**

Basin	1990-2000	Percent of Total Growth	1990-2020	Percent of Total Growth
	Average Annual Change		Average Annual Change	
North Oahu (East)	(45)	-1.2%	49	0.9%
Kailua- Kaneohe/Kahaluu	(234)	-6.4%	19	0.4%
Waimanalo	11	0.3%	23	0.4%
East Mamala Bay	(579)	-15.9%	1,803	34.0%
West Mamala Bay	4,071	112.0%	3,134	59.1%
Waianae	186	5.1%	159	3.0%
Wahiawa	71	2.0%	(10)	-0.2%
North Oahu (West)	155	4.3%	131	2.5%
Total	3,636	100.0%	5,308	100.0%

Source: City & County of Honolulu, Department of Environmental Services, City & County of Honolulu, Department of Planning and Permitting, 2001.

The Department has developed the 2001-2005 Capital Improvement Program, the 2001-2010 Capital Improvement Program and the 1998-2017 Capital Improvement Program, in part to provide new facilities which will be required to reliably serve projected growth in the number of customers served by the Wastewater System. See "CAPITAL IMPROVEMENT PROGRAM" and Appendix B, "Engineer's Report."

CAPITAL IMPROVEMENT PROGRAM

The Department staff manages and updates at least annually a long-range Capital Improvement Program (the "CIP") to achieve several goals. The CIP is a long-range planning tool used to estimate project costs and timing of expenditures over a 20-year period, currently through 2017. The 2001-2005 Capital Improvement Program and the 2001-2010 Capital Improvement Program are part of this 20-year plan. The Department develops the CIP with the objective of providing safe and reliable facilities to process the wastewater discharge of all sewer customers throughout Oahu. CIP projects are needed for the rehabilitation of existing facilities, the expansion of capacity to accommodate growth, and the improvement of facilities and processes.

EPA Consent Decree

The City and County and the EPA have entered into a consent decree that has established the City's direction on future wastewater issues. The overall goal established by the consent decree is to develop a proactive plan to reduce and prevent wastewater spills and bypasses from the collection system, pump stations, and treatment plants.

A number of projects identified in the CIP are designed to comply with an EPA consent decree approved October 17, 1995. Consent decree projects are developed to meet three major program objectives:

1. *Pretreatment:* Source control program to control introduction of inappropriate materials into the collection and treatment system. This program does not require funding of any CIP project.
2. *Collection system compliance:* Spill reduction program for both dry weather spills, and wet weather spills.
3. *Avoided cost:* Additional measures taken by the Department to avoid fines for violations or noncompliance.

Criteria for Ranking CIP Projects by Priority

The Department considers the CIP to be a flexible tool which allows the Department staff to determine the impact of adjusting the phasing and priority of projects. As of the middle of 2001, the long-range CIP included a list of projects with estimated appropriations totaling approximately \$2.4 billion (in inflated dollars). Many of the projects shown in the CIP may not begin in the year specified or at all if needs change. The Department staff has developed a policy for ranking the CIP projects by priority to determine order and timing of projects. The policy is shown in the following table, with the highest priority criteria listed first:

Table 3

Priority for CIP Projects

Priority Class	Description
I	Safety and public health – immediate
II	Protection of the environment – immediate
III	Permit and regulatory compliance – immediate
IV	Completion of ongoing projects
V	Preventive
VI	Funding requirements
VII	System expansion
VIII	Other

The rankings are intended as guidelines for CIP project planning, not as hard and fast rules. A project considered in a low priority class may be upgraded to a high priority position in the CIP due to any number of factors. For example, if a service area is very close to reaching and surpassing the capacity of its wastewater facilities, the expansion of the system in that area rises in priority. System expansion can entail projects which affect permit and regulatory compliance, protection of the environment, or safety and public health. Through the use of these guidelines combined with analyses of funding and other resource constraints, staff can develop a CIP which best satisfies the needs of the Department customer base. The 1998-2017 Capital Improvement Program was developed using these CIP guidelines and constitutes the current 20-year CIP.

Classification of CIP Projects

The City and County expects to use various funding sources to finance CIP projects: (i) proceeds of the Series 2001 Bonds, (ii) proceeds of additional Bonds and Subordinate Obligations to be issued, (iii) proceeds of Reimbursable Obligations previously issued and currently available, (iv) proceeds of wastewater revenue bonds previously issued and currently available, (v) the Net Revenues of the Wastewater System, and (vi) Wastewater System Facilities Charge. Revenues from Wastewater System Facility Charges are intended to cover a portion of the project expenditures relating to expansion of the Wastewater System to serve future growth in the number of customers. Revenues from sewer service charges are earmarked for the expenditures resulting from rehabilitation or upgrade of the wastewater system for existing users. To effectively determine the costs to be recouped by these respective charges, the Department makes a fair estimate of the share of costs attributable to expansion and rehabilitation. Where an improvement benefits both existing and future users, the Department identifies the relative portion allocable to each. The classes of CIP projects include system expansion, system upgrade, and replacement/rehabilitation.

System expansion: Improvements which increase the design capacity of treatment, transmission, or support facilities and equipment to accommodate new or future growth. Future users would finance system expansion project costs partially through revenues from Wastewater System Facility Charges.

System upgrade: Improvements which upgrade the service level standard. For example, an upgrade to secondary treatment processes where only primary treatment processes were used. To fairly allocate costs between future and existing users, the portions of upgrade costs attributable to expansion and current use must be identified.

Replacement/rehabilitation: Improvements which replace or rehabilitate facilities serving existing development. Existing users pay the costs of replacement and rehabilitation projects through sewer service charges.

2001-2005 Capital Improvement Program

To meet certain consent decrees entered into by the Department with Federal and State regulatory bodies and to reliably serve projected growth in the number of customers served by the Wastewater System, the Department has developed and adopted the 2001-2005 Capital Improvement Program. The additions and improvements to the Wastewater System, the costs of which are to be financed in part from the proceeds of the Series 2001 Bonds, are part of the 2001-2005 Capital Improvement Program. The City and County expects to appropriate approximately \$907 million (in inflated dollars) for the 2001-2005 Capital Improvement Program. A portion of these appropriations will actually be expended after the 2001-2005 period. For actual expenditures during the 2001-2005 period, see Appendix B, "Engineer's Report." The projected appropriations for the various CIP projects of and the expected sources of funding for the 2001-2005 Capital Improvement Program are set forth in the following tables.

Table 4

Projected Appropriations for 2001-2005 Capital Improvement Program

Project	Projected Cost
CIP Projects	\$858,710,000
Project Management	28,110,000
<u>Capital Equipment</u>	<u>19,730,000</u>
Total	\$906,550,000

Table 5

Expected Sources of Funding for 2001-2005 Capital Improvement Program

Funding Source	Projected Amount
Subordinate Obligations ⁽¹⁾	\$ 50,000,000
Facility Charges ⁽²⁾	8,330,000
Net Revenues ⁽³⁾	53,270,000
Series 2001 Bonds	125,000,000
<u>Additional Bonds</u>	<u>669,950,000</u>
Total	\$906,550,000

(1) State revolving fund loan proceeds.

(2) Fees collected for new Wastewater System connections.

(3) Cash funded CIP.

2001-2010 Capital Improvement Program

The 2001-2010 Capital Improvement Program is part of the 1998-2017 Capital Improvement Program. The City and County expects to appropriate approximately \$1.575 billion (in inflated dollars) for the 2001-2010 Capital Improvement Program. A portion of these appropriations will actually be expended after the 2001-2010 period. For actual expenditures during the 2001-2010 period, see Appendix B, "Engineer's Report." The projected appropriations for the various CIP projects of and the expected sources of funding for the 2001-2010 Capital Improvement Program are set forth in the following tables.

Table 6

**Projected Appropriations for
2001-2010 Capital Improvement Program**

Project	Projected Cost
CIP Projects	\$1,470,010,000
Project Management	61,840,000
<u>Capital Equipment</u>	<u>43,640,000</u>
Total	\$1,575,490,000

Table 7

**Expected Sources of Funding for
2001-2010 Capital Improvement Program**

Funding Source	Projected Amount
Subordinate Obligations ⁽¹⁾	\$ 100,000,000
Facility Charges ⁽²⁾	17,003,000
Net Revenues ⁽³⁾	117,170,000
Series 2001 Bonds	125,000,000
<u>Additional Bonds</u>	<u>1,216,317,000</u>
Total	\$1,575,490,000

(1) State revolving fund loan proceeds.

(2) Fees collected for new Wastewater System connections.

(3) Cash funded CIP.

1998-2017 Capital Improvement Program

The 1998-2017 Capital Improvement Program ("CIP") is the current twenty-year CIP the Department has undertaken. The City and County expects to appropriate approximately \$2.4 billion (in inflated dollars) for the 1998-2017 Capital Improvement Program. A portion of these appropriations will actually be expended after the 1998-2017 period. The projected appropriations for the various CIP projects of and the expected sources of funding for the 1998-2017 Capital Improvement Program are set forth in the following tables.

Table 8

**Projected Appropriations for
1998-2017 Capital Improvement Program**

Project	Projected Cost
CIP Projects	\$2,139,830,000
Project Management	118,260,000
Capital Equipment	87,460,000
<u>Ongoing Projects</u>	<u>84,420,000</u>
Total	\$2,429,970,000

Table 9

**Expected Sources of Funding for
1998-2017 Capital Improvement Program**

Funding Source	Projected Amount
Reimbursable Obligations ⁽¹⁾	\$ 83,985,000
Subordinate Obligations ⁽²⁾	217,000,000
Facility Charges ⁽³⁾	39,183,000
Net Revenues ⁽⁴⁾	357,517,000
Series 1998 Bonds	50,000,000
Series 2001 Bonds	125,000,000
<u>Additional Bonds</u>	<u>1,555,285,000</u>
Total	\$2,429,970,000

(1) Previously issued general obligation bonds.

(2) State revolving fund loan proceeds.

(3) Fees collected for new Wastewater System connections.

(4) Cash funded CIP.

HISTORICAL AND PROJECTED REVENUES, EXPENSES AND COVERAGES

Since its initial revenue bond issue in 1998, the Department has exceeded coverage requirements, as shown in Table 10, which sets forth historical and projected revenues, expenses and debt service coverage of the Wastewater System.

Table 10

**Historical and Projected Revenues, Expenses and Debt Service Coverages
(\$ in thousands)**

	Historical		<i>(Fiscal Year Ending June 30)</i>				
			Projected				
	1999	2000	2001	2002	2003	2004	2005
Revenues*							
Sewer Service Charges	\$110,630	\$121,703	\$111,253	\$111,220	\$112,600	\$125,600	\$141,400
Interest Earnings	2,864	2,809	1,900	5,700	4,194	4,637	4,959
Other Revenues	<u>1,092</u>	<u>1,050</u>	<u>1,038</u>	<u>872</u>	<u>872</u>	<u>872</u>	<u>872</u>
Total Revenues	\$114,586	\$125,562	\$114,191	\$117,792	\$117,666	\$131,109	\$147,231
Operating Expenses	65,660	67,700	66,447	71,310	69,675	77,362	77,400
Net Revenues	\$48,926	\$57,862	\$47,744	\$46,482	\$47,991	\$53,747	\$69,831
Annual Debt Service							
Senior Lien Bonds**	0	2,788	2,574	6,826	12,442	19,652	31,053
D/S Coverage	n.a.	20.75x	18.55x	6.81x	3.86x	2.73x	2.25x
Senior and Junior Lien Bonds	0	15,204	14,034	18,287	24,209	32,154	44,398
D/S Coverage	n.a.	3.81x	3.40x	2.54x	1.98x	1.67x	1.57x
Total Obligations	24,506	38,470	34,807	30,862	32,841	41,468	54,394
D/S Coverage	2.00x	1.50x	1.37x	1.51x	1.46x	1.30x	1.28x

* Does not include System Facility Charges, which are pledged under the Resolution but are not defined in Revenues.

** Includes actual debt service for Senior Series 1998 and 2001 Bonds and assumes 5.5% interest rate for all future issues.

CONCLUSIONS OF CONSULTING ENGINEER

The Consulting Engineer has concluded that (i) the estimated project costs and construction schedules that have been developed for the projects to be financed, including the projects to be financed from the proceeds of the Series 2001 Bonds, are reasonable and achievable; (ii) the 1998-2017 Capital Improvement Program is technically sound and conforms with good engineering practice and the estimated total costs of the program have been realistically assessed; (iii) the cost-effectiveness of the Wastewater System operations and maintenance activities is anticipated to improve after the proposed projects in the 1998-2017 Capital Improvement Program are accomplished; and (iv) completion of the proposed projects will permit the City and County to attain and to remain in compliance with all federal, state, and local regulations regarding the treatment and discharge as expressed in the current NPDES permit, consent decrees and administrative orders.

The Consulting Engineer has projected revenues, expenses and coverages for the Wastewater System for the Fiscal Years 2001 to 2010, inclusive. The projections are based on inflated dollars (*i.e.*, adjusted from 2001 dollars). The projections indicate that with respect to the Fiscal Years 2001 to 2010, inclusive, the City and County can (i) issue the Series 2001 Bonds to finance \$125 million of necessary additions and improvements to the Wastewater System, to fund the Common Reserve Account in an amount sufficient to satisfy its requirement, and to pay the costs of issuing the Series 2001 Bonds; (ii) finance an additional \$1.45 billion of improvements to the Wastewater System from proceeds of additional Bonds and Subordinate Obligations to be hereafter issued, proceeds of Reimbursable Obligations previously issued and currently available, the Net Revenues and Wastewater System Facility Charges over the nine year period; and (iii) fully meet all reserve funding and coverage requirements under the First Resolution and the Second Bond Resolution by raising sewer rates and charges by 11% in Fiscal Year 2003-2004 and another 6% to 12% in each of the Fiscal Years thereafter, and by raising Wastewater System Facility Charges by 3.0% in Fiscal Year 2003-2004 and another 3.0% in each of the Fiscal Years thereafter. The average monthly residential wastewater charge is expected to increase from \$33.35 to \$64.29 (in inflated dollars) by 2010. The Wastewater System Facility Charge is expected to increase from \$1,146 to \$1,409 (in inflated dollars) by 2010. The revenues from the Wastewater System Facility Charge were 1.8% of total revenues of the Wastewater System in fiscal year 1999-2000 and is projected still to be 1% by fiscal year 2009-2010. The Consulting Engineer has concluded that current customer rates and charges for the City and County compare favorably to other similar wastewater agencies. See Appendix B, "Engineer's Report."

The Consulting Engineer, based upon its studies, the assumptions discussed in the Engineer's Report and its review of the data and analysis provided by the City and County and its consultants, has concluded in its Engineer's Report that:

1. All City and County-owned WWTPs are currently meeting national and state discharge requirements except for the Sand Island WWTP. Recently, the Sand Island WWTP plant has experienced difficulties in meeting the 30 percent BOD reduction requirement. The 2001-2005 CIP Projects implement the modifications required to fix other existing deficiencies, and to accommodate planned growth, as well as projects required by and identified in the new discharge permit.
2. Completion of the proposed CIP projects constituting the 1998-2017 Capital Improvement Program described in the Engineer's Report will permit the City and County to attain and to remain in compliance with all federal, state, and local regulations regarding the treatment and discharge as described in the current NPDES permit and consent decrees.
3. An estimated \$1.71 billion of non-discretionary CIP project expenditures for various treatment, collection and other facilities are required to be constructed during the 20-year CIP program. This is to eliminate the current and projected critical deficiencies, to meet consent decree milestones, and to provide a wastewater system in a satisfactory operating condition based on projected wastewater usage and environmental and other regulatory requirements. The remaining approximately \$0.39 billion of CIP projects are discretionary, and have been identified primarily to improve wastewater treatment and collection systems efficiency. These CIP project

expenditures are to be funded from proceeds of bonds, including the Wastewater Revenue Bonds, Series 2001 Bonds, and from net revenues and other charges.

4. The \$2.1 billion of CIP expenditure is technically sound and conforms with good engineering practice and the estimated total costs of the CIP have been realistically assessed.
5. The cost-effectiveness of the Wastewater System operations and maintenance activities is anticipated to improve after the proposed 1998-2017 Capital Improvement Program is accomplished.
6. The projects to be financed by proceeds of the Series 2001 Bonds are the highest priority projects required to meet consent decree requirements and protect public health. They are included in recently completed facility plans, which identify the need for projects through the year 2017, and provide the most cost effective facilities evaluated in those plans.
7. The estimated project costs and construction schedules that have been developed for the projects of the 2001-2005 Capital Improvement Program are reasonable and achievable.
8. The operations of the Wastewater System are directed by a competent professional staff for the disciplines of operations specialists, maintenance (including electrical, instrumentation and mechanical), laboratory personnel and other technical support personnel.
9. The financial projections with respect to the Wastewater System are based on reasonable and conservative assumptions and should fairly reflect the financial performance of the Wastewater System.
10. Current customer rates and charges for the City and County of Honolulu compare favorably to other similar wastewater agencies. Projected customer rates and charges are based on periodic larger increases followed by extended periods of stable rates. This rate setting philosophy results in projected rates and charges which are reasonable when compared on an equivalent annual basis.
11. In the opinion of Carollo Engineers, projected sewer service and system facility charges will provide revenue sufficient to:
 - Meet all projected costs of operation, maintenance and routine replacement of sewer system facilities.
 - Meet the existing debt service obligations and the projected requirements for the Series 2001 Bonds and future bond issues.
 - Provide sufficient revenue to pay the costs of the City and County of Honolulu's CIP through the end of the forecast period.
 - Meet reserve requirements of bond resolution.
12. The funds obtained from the sale of the Series 2001 Bonds, current cash reserves, fees collected over the next few years and future bond issues will be adequate to fund these current projects.
13. The rate at which growth occurs will not affect the ability of the City and County to meet its debt obligations because the growth is a small component of the overall costs and revenues associated with the financial projections. In general, many of the CIP projects of the 1998-2017 Capital Improvement Program are necessary and must proceed based on consent decree requirements and public safety and health concerns with or without any additional connections.

CERTAIN FINANCIAL, OPERATING AND OTHER INFORMATION AND STATISTICS

Management's Discussion of Financial Performance

In the period since the wastewater program became fully self-supporting in 1993, the program's financial position has been consistently strong. The change to enterprise fund status in 1998 further strengthened the position of the utility through clearer definition of enterprise assets, understanding of their current value, and clarity in responsibilities. The issue of the initial Wastewater Revenue bonds in 1998 accompanied by a strong debt and financial policy adopted by the City Council served to insure a continuing commitment to a strong financial posture for the wastewater enterprise.

Sewer service charge revenue grew with the rate increase effective July 1, 1993, and has continued to hold steady since that time. Revenues have been sufficient throughout the period to meet all operation and maintenance and debt service requirements, including coverage since 1998, without a need for rate increases. Water conservation efforts have held water use at the same level for several years; however, the significant base component of the rate structure and growth in customers has precluded these efforts from having a major impact on revenues. The sewer service charge program will remain strong reflecting the high residential component of wastewater customers and the lack of any single large commercial customer.

Receipts from the Wastewater System Facility Charge have increased over the past two years reflecting improved local economic conditions allowing development; however, the Wastewater System Facility Charge accounts for less than 2% of revenues, is solely dedicated to expansion, and is not considered when calculating debt service coverage.

Equally important are continuing efforts to control increases in expenses. Operational expenditures and budgets have remained consistent over the past three years and continuing analysis of staffing levels, operational procedures, and automation opportunities will help continue this trend.

Net revenues have increased over the period, including fiscal years 1998, 1999, and 2000, reflecting continuing cost controls and improved structuring of capital debt. Net revenues were artificially high in 2000 reflecting the change to full enterprise accounting and full versus modified accrual of sewer service charge revenues. Net revenues decreased in 2001 reflecting the previously mentioned stable rate structure. Over the past five-year period, net income was \$50.4 million (8.7% of total revenues) without any increase in fees and charges. The enterprise has continued to maintain a surplus throughout the period.

In the opinion of the Department, the financial position of the Wastewater Enterprise is strong, with a substantial reserve balance which provides reasonable protection against unforeseen events and financial flexibility for the future. Financial planning continues to identify the best alternative to maintain a strong financial posture while providing quality service to the customer and the community at a reasonable price. City Council and Administration policies support the continuing revenue levels necessary to provide for current and future requirements.

Billing and Collection

Over 90% of Wastewater System sewer service charge billing is done by the Board of Water Supply through inclusion on the water bill. This billing program consistently has a delinquency (bills over 90 days old) of less than 6% and an uncollectable rate of less than 0.3%.

Should bills not be paid, the authority exists, and has been exercised, to terminate water service for non-payment of water and sewer service charges.

Ten Largest Customers

The ten largest customers, listed below, of the Wastewater System account for less than 3% of the annual revenues of the system.

Table 11

Ten Largest Customers

Customer	Sewer Service Charges (FY00)	Percentage of Revenues
University of Hawaii	\$593,442	0.49%
Honolulu International Airport	424,660	0.35
Hilton Hawaiian Village	385,464	0.32
Sheraton Royal Hawaiian Hotel	378,585	0.31
Halawa Correctional Facility	300,625	0.28
Hyatt Regency Waikiki	272,321	0.22
United Laundry Services	201,356	0.17
Maunakea Tower	199,495	0.16
Halekulani Hotel	172,699	0.14
Hilton Hawaiian Village (2 nd account)	169,380	0.14

Debt and Financial Policies

The City Council, by resolution adopted on November 10, 1998, established the Debt and Financial Policies for the Wastewater System to provide a general framework for the conduct of financial activities and has been in compliance with such policies since their adoption. Such Debt and Financial Policies specify, among other things, that the City and County will target to maintain revenues (excluding Wastewater System Facility Charges) of 1.60 times senior revenue bond debt service and 1.25 times debt service for all revenue bonds, regardless of the priority of lien. It is expected that the City and County will adopt increases in the sewer service charges necessary to meet the debt service coverage requirements prescribed in its debt and financial policies. The debt and financial policies do not constitute an agreement with holders of Bonds, and the City and County has not undertaken any obligation to such holders or any other person to comply with such policies or to meet such targets.

Since establishment of these policies in November 1998, the Wastewater Enterprise has consistently met or exceeded all policy requirements.

Certain operating and financial statistics of the Department are summarized in the following tables. Unless otherwise noted, tables provided herein contain data furnished by the City and County.

Table 12

Water and Sewer Customer Accounts as of April, 2001

Customer Class	A	B	C	D	E	F	G	J	L	M	N	P	Q	Percent Accounts
	Sewer Regular Monthly Charges	Cesspool Monthly Charge (Contract)	Cesspool Per Call	Separate BWS Water Meter (domestic use)	Cesspool Chemical Treat	Agreed to Monthly Charge	No Charge	Non-residential SS surcharge	Private Water Well	Private Water Meter	Private Water Meter	Minimum Monthly Charge Only	Septic System	Total
1 - Public Sewer														
10 - Single family/duplex	116,494	505	8,616	0	182	4	2,188	0	0	0	8	0	68	128,065
15 - Mixed residential	0	0	3	0	0	0	191	0	0	0	1	0	0	195
20 - Multi-family	5,777	3	98	0	0	0	76	0	0	0	10	0	0	5,964
25 - Mixed users	277	0	1	0	0	2	0	0	0	0	23	0	0	303
														88.02%
														0.13%
														4.10%
														0.21%
Total residential	122,548	508	8,718	0	182	6	2,455	0	0	0	42	0	68	134,527
Residential Sewer Accounts	122,548	508	0	0	182	6	0	0	0	0	42	0	0	123,286
30 - Commercial	4,592	0	476	1	0	14	1,705	625	1	0	95	45	1	7,555
40 - Hotels	256	0	2	0	0	0	3	0	1	0	1	0	0	263
50 - Industrial	503	0	85	0	0	1	19	0	0	1	0	0	0	609
61 - US Military Installation	8	0	13	0	0	0	11	0	0	0	2	0	1	35
62 - US Non-military	22	0	5	0	0	0	1	0	1	0	1	0	0	30
63 - State	190	0	99	0	0	148	294	0	1	0	12	0	0	744
65 - City	110	0	105	0	0	261	305	0	0	0	3	43	0	827
70 - Agriculture	2	0	370	0	0	0	17	0	0	0	0	0	1	390
80 - Religious	446	0	35	0	0	2	10	0	0	0	18	0	0	511
														0.35%
														7.54%
Total Non-residential	6,129	0	1,190	1	0	426	2,365	625	4	1	132	88	3	10,964
Non-residential Sewer Accounts	6,129	0	0	1	0	426	0	625	4	1	132	88	3	7,409
Total Accounts	128,677	508	9,908	1	182	432	4,820	625	4	1	174	88	71	145,491
Total Sewer Accounts	128,677	508	0	1	182	432	0	625	4	1	174	88	3	130,695
Percent Total Accounts	88.44%	0.35%	6.81%	0.00%	0.13%	0.30%	3.31%	0.43%	0.00%	0.00%	0.12%	0.06%	0.05%	100.00%
Percent Sewer Accounts	98.46%	0.35%	0.00%	0.00%	0.14%	0.33%	0.00%	0.48%	0.00%	0.00%	0.13%	0.07%	0.00%	100.00%

Table 13
History of New Sewer Connections by Type

Fiscal Year Ending	Single Family New Units	Multi Family		Nonresidential ESDUs	Total ESDUs
		New Units	ESDUs		
1996	1,359	1,399	979	79	2,417
1997	915	716	498	202	1,615
1998	998	226	158	118	1,274
1999	1,387	122	85	25	1,497
2000	1,527	69	48	36	1,611
5 year average	1,237	506	354	92	1,683
Projected annual growth	1,300	140	100	60	1,460

Table 14
Existing Sewer Users
Fiscal Year Ended June 30, 2000

Customer Classification	Number of Living Units	Number Of Equivalent Single-Family Dwelling Units (ESDUs)	Estimated Wastewater Flow (MGD)
Residential			
Single family/duplex	125,637	125,637	38.319
Multi-family residences	109,862	76,903	23.510
Less: Hawaii Kai	994	994	0.303
Total residential	234,505	201,546	61.527
Nonresidential	N/A	78,527	29.857
Infiltration/Inflow	N/A	N/A	27.566
Total	470,998	280,073	118.950

Table 15
Historic Population Growth
Oahu, 1970 - 2000

Calendar Year	Resident Population	Defacto Population*
1970	630,528	650,700
1980	764,600	822,408
1990	838,032	899,731
1991	846,594	897,798
1992	857,884	906,425
1993	862,867	901,984
1994	869,959	911,199
1995	871,369	911,501
1996	871,609	909,660
1997	837,115	919,240
1998	871,768	916,203
1999	864,571	913,222
2000	876,156	NA

Source: State of Hawaii Department of Business, Economic Development & Tourism, Data Book, 1999. U.S. Census 2000.

*Includes visitor population.

Table 16**Number of Equivalent Single Family Dwelling Units (ESDUs)**

Fiscal Year Ending 6/30	Single-Family Units	Multifamily Units	ESDUs	Commercial ESDUs	Total ESDUs
1990	110,089	98,233	68,764	75,806	254,659
1991	110,738	99,582	69,708	75,881	256,327
1992	111,663	101,403	70,983	76,166	258,812
1993	114,407	103,516	72,462	76,704	263,573
1994	116,446	105,058	73,541	76,941	266,928
1995	118,247	106,758	74,731	77,130	270,166
1996	119,451	107,039	74,928	77,280	271,659
1997	120,810	108,437	75,907	77,359	274,076
1998	121,725	109,514	76,405	77,561	275,691
1999	122,723	109,740	76,563	77,679	276,965
2000	124,110	109,862	76,648	77,704	278,462
2001	125,637	109,931	76,696	77,740	280,073

Table 17**Wastewater Flows by Treatment Facility (MGD)**

<u>Treatment Facility</u>	<u>Design Capacity</u>	<u>2000 Flow</u>	<u>Projected Flow (2020)</u>
Sand Island	82.00	67.56	92.60
Kahuku WWTP	0.40	0.13	0.15
Honouliuli WWTP	38.00	26.78	32.80
Waimanalo WWTP	0.70	0.57	0.62
Kuliouou WWPS* (Hawaii Kai WWTP)	N/A	0.37	0.38
Wahiawa WWTP	2.50	1.89	1.89
Kailua WWTP	15.25	12.99	13.40
Waianae WWTP	5.20	3.20	3.50
Paalaa Kai WWTP	0.14	0.12	0.14

* The Kuliouou WWPS does not provide treatment, but pumps wastewater from a Department Collection System to a private treatment plant (Hawaii Kai WWTP). Inclusion here is to show total volume of wastewater handled by the Department.

Table 18**History of Major Wastewater Revenue Sources**

Fiscal Year Ending	Sewer Service Charges*	Wastewater Facilities Charge
1991	53,333,000	\$1,726,000
1992	74,967,000	3,256,000
1993	77,492,000	5,206,000
1994	105,303,000	3,895,000
1995	108,701,000	3,543,000
1996	109,765,778	1,769,950
1997	110,609,000	1,166,000
1998	111,840,586	1,027,389
1999	111,377,449	1,665,827
2000**	121,703,000	2,279,175

* Sewer Service Charge Only - Does Not Include Connection Or Lateral Installation Charges.

** Sewer Service Charge revenue converted to accrual accounting in Fiscal Year 2000.

Table 19**Summary of Current Sewer Rate Ordinance***

Residential sewer service charges	Effective 7/1/93 Standard
Single family and duplex dwellings served by city water system per dwelling unit per month:	
Monthly base charge:	\$24.85
Month usage charge:	
First 2,000 gallons of metered water consumed:	no charge
Charge per 1,000 gallons of metered water consumed over 2,000 gallons, the water consumed reduced by the irrigation factor of 18%:	1.05
Single family and duplex dwellings not served by city water system per dwelling unit per month:	33.65
Multiple-unit dwellings served by city water system per dwelling unit per month:	
Monthly base charge:	17.40
Monthly usage charge:	
First 2,000 gallons of metered water consumed:	no charge
Charge per 1,000 gallons of metered water consumed over 2,000 gallons, the water consumed reduced by the irrigation factor of 18%:	1.05
Multiple-unit dwellings not served by city water system per dwelling unit per month:	23.55
Nonresidential sewer service charges	
Domestic strength wastewater:	
1. Metered water usage:	
a. If 9,000 gallons or less per month,	
(1) Monthly base charge:	22.35
(2) Charge per 1,000 gallons:	0.13
b. If more than 9,000 gallons per month,	
(1) Charge per 1,000 gallons:	2.49
2. Metered wastewater discharge:	
a. If 7,000 gallons or less per month,	
(1) Monthly base charge:	22.35
(2) Charge per 1,000 gallons:	0.16
b. If more than 7,000 gallons per month,	
(1) Charge per 1,000 gallons:	3.12
Extra strength wastewater:	
1. Charge per 1,000 gallons of water usage:	
$0.857 + 0.143, (S.M./200):$	2.49
2. Charge per 1,000 gallons of wastewater discharge:	
$0.857 + 0.143 (S.M./200):$	3.12

* A separate and modified rate schedule exists for those customers, such as the U.S. Government agencies, who prepay a capital contribution to account for additional capacity requirements.

Wastewater system facility charge	Effective 1991/92
Wastewater system facility charge per ESDU	1,146
Terms in strength surcharge formula ($A + (SSI/200 \times B)$):	
A. Flow component of wastewater system facility charge	985
B. Strength component of wastewater system facility charge	161

FINANCIAL STATEMENTS

The operations of the Department are accounted for in the Sewer Fund and the Wastewater System Facility Charge Account. The Sewer Fund is classified as an enterprise fund of the City and County and is currently audited as a part of the City and County's general purpose financial statements that are prepared annually.

Attached hereto as Appendix A are extracts of the financial statements of the City and County as of June 20, 2000, relating to the Sewer Fund, together with the auditor's report thereon delivered by PricewaterhouseCoopers LLP. Such firm has not reviewed and has no responsibility with respect to this Official Statement.

The following tables have been extracted from both unaudited and audited financial statements of the City and County relating to the Department. It should be noted that "Revenues" as defined in the First Bond Resolution does not include Wastewater System Facility Charges.

The Sewer Fund was converted to enterprise accounting effective July 1, 1999. This change in accounting results in different presentations of financial data beginning with Fiscal Year 1999/2000. Tables 20 and 21 summarize revenues and expenses and Tables 22 and 23 provide fund balances. Future presentations will be in accordance with those shown in Tables 21 and 23 reflecting enterprise accounting and consistency with GASB 34 reporting requirements.

Table 20

**Department of Environmental Services
Summary of Wastewater Revenues and Expenses – FY 96-99**

	<u>1995/96</u>	<u>1996/97</u>	<u>1997/98</u>	<u>1998/99</u>
Revenues				
Sewer service charges	\$109,764,828	\$110,608,822	\$111,840,586	\$111,377,449
System facility charge	1,769,950	1,166,000	1,027,389	1,665,827
Cesspool services	747,271	839,978	0	0
Sewer connections	205,436	30,000	5,505	2,400
Sewer lateral installations	44,602	17,000	36,431	5,319
Other	198,032	147,000	238,300	179,164
Investments	0	0	0	2,863,715
State	<u>492,702</u>	<u>480,107</u>	<u>397,491</u>	<u>55,496</u>
Total revenues	113,222,821	113,288,907	113,545,702	116,149,370
Expenses				
Direct operating expenses				
Administration	3,776,689	5,286,243	2,750,213	3,361,981
Service control	1,696,143	1,842,568	1,850,266	0*
Planning	1,126,531	856,884	1,075,815	0*
Engineering	2,214,424	1,898,116	1,904,285	0*
Construction	1,473,593	1,426,919	1,622,423	0*
Environmental (Water) quality	5,321,592	4,978,702	4,188,302	3,996,671
Sewer maintenance	8,132,024	9,155,549	7,384,467	5,982,159
Cesspool pumping	984,100	866,482	930,565	904,965
Chemical treatment	92,233	104,508	98,171	91,293
Wilson Tunnel maintenance	327,055	480,107	262,425	0
Treatment and disposal				
Administration / maintenance	12,683,571	11,196,024	10,564,837	9,416,216
East Oahu	14,125,950	6,241,750	5,532,331	5,150,182
Windward	0	4,508,448	4,274,048	3,897,071
West Oahu	<u>6,831,720</u>	<u>6,578,957</u>	<u>6,112,403</u>	<u>5,879,232</u>
Total treatment and disposal	33,641,241	28,525,179	26,483,619	24,342,701
Subtotal direct operating expenses	58,785,625	55,421,257	48,550,551	38,679,770
Central administrative support	6,198,783	5,467,795	5,795,000	4,893,200
Non-salary personnel costs	9,658,708	10,267,344	9,862,296	8,054,402
Other City agencies	2,381,350	2,904,509	3,665,180	7,693,225
Building Rental	0	675,000	675,000	675,000
Radio support	0	175,000	175,000	35,000
Judgement and losses	7,000,000	0	0	0
General fund reimbursement	0	13,224,360	3,772,163	0
Subtotal indirect operating expenses	<u>25,238,841</u>	<u>32,714,008</u>	<u>23,944,639</u>	<u>21,350,827</u>
Existing general obligation bond debt service & state revolving fund loans	33,431,876	35,577,183	39,104,000	24,505,861
Facilities replacement reserve	0	156,251	0	0
Total expenses	117,456,342	123,868,699	111,599,190	84,536,458
Net income (deficit)	(4,233,521)	(10,579,792)	(1,946,512)	31,612,912

* A city-wide reorganization effective July 1, 1998, resulted in direct operating expenses for the categories Service Control, Planning, Engineering, and Construction to be distributed into other direct operating expense categories (Administration) and into indirect operating categories (Other City Agencies).

Table 21

**Department of Environmental Services
Sewer Fund
Enterprise Fund Statement of Revenues, Expenses and Charges in Retained Earnings (Deficit)
(AMOUNTS IN THOUSANDS)**

	1999/2000
Operating Revenues:	
Sewer Service Charges	\$122,450
Other Revenue	<u>2,410</u>
Total Operating Revenues	124,860
Operating Expenses:	
Administrative and general	31,323
Maintenance	532
Depreciation	23,295
Contractual services	7,105
Fringe benefits	10,157
Materials and supplies	57
Fuel and lubricants	535
Utilities	7,125
Other	<u>0</u>
Total Operating Expenses	<u>80,129</u>
Operating Income (Loss)	44,731
Nonoperating Revenues (Expenses):	
Interest revenue	6,873
Interest expense	(27,910)
Loss from disposal of property	(6)
Other	<u>(262)</u>
Total Nonoperating Revenues (Expenses)	(20,305)
Income (Loss) before operating transfers	24,426
Operating Transfers In	17,900
Operating Transfers Out	<u>(5,733)</u>
Net Income (Loss)	35,593
Retained Deficit – July 1 Residual equity transfer from other fund	<u>8,076</u>
Retained Earnings (Deficit) – June 30	\$ 44,669

Table 22

**Department of Environmental Services
Summary of Wastewater Fund Balances FY 96-99**

	1995/96	1996/97	1997/98	1998/99
	(\$ in thousands)			
Sewer Fund (#170)				
Excess of revenues	\$45,082	\$43,859	\$ 1,256	\$56,511
Unreserved – undesignated fund balance, July 1	43,273	42,734	42,983	42,885
Unreserved – undesignated fund balance, June 30 (budgetary basis)	\$43,273	\$42,734	\$44,239	\$99,396
Adjustments to conform with GAAP:				
Encumbrances included above	12,842	6,281	5,522	3,573
Expenditures – prior year encumbrances	(9)	(9,672)	(10,366)	(4,990)
Accrued Retroactive payroll		(45)	(45)	(4,024)
Decrease (increase) in reserved for encumbrances	(\$2,490)	(\$3,685)	\$5,208	
Residual equity transfer to WW System Facility Charge Fund			(1,763)	
Increase in reserved fund balance, June 30				(36,477)
Unreserved – undesignated fund balance, June 30 (GAAP basis)	43,859	42,983	42,885	59,352
Reserved for encumbrances, June 30	19,782	16,097	10,889	9,015
Increase in reserved for debt service	0	0	0	36,477
Fund balance (GAAP basis), June 30	\$63,641	\$59,080	\$53,774	\$104,844
Wastewater System Facility Charge Fund (#175)*				
Excess of revenues over expenditures and other uses	\$(2,259)	\$(2,915)		
Unreserved-undesignated fund balance, July 1	2,511	252		
Unreserved-undesignated fund balance, June 30 (budgetary basis)	252	(2,663)		
Unreserved-undesignated fund balance, June 30 (GAAP basis)	252	(2,663)		
Reserved for encumbrances, June 30	0	0		
Fund balance (GAAP basis), June 30	\$ 252	\$(2,663)		

* The Wastewater System Facility Charge Fund was abolished in May 1998. Wastewater System Facility Charges are accounted for in the Wastewater System Facility Charge Account.

Source: Comprehensive Annual Financial Reports, June 30, 1996, 1997, 1998, and 1999.

Table 23
Department of Environmental Services
Sewer Fund
Enterprise Fund Balance Sheet
(AMOUNTS IN THOUSANDS)

1999/2000

ASSETS	
Current Assets:	
Cash and cash equivalents	\$ 57,462
Investments	84,016
Receivables	
Accounts	16,227
Interest	393
Note	0
Due from other funds	7,583
Inventories of parts, materials and supplies at cost	0
Inventories of real estate held for sale	0
Prepaid expenses and other assets	0
Total Current Assets	183,553
Restricted Assets:	
Other	0
Fixed Assets:	
Land	53,713
Buildings and Improvements	331,031
Transmission and distribution system	469,538
Equipment and machinery	19,674
Construction work in progress	62,238
Accumulated depreciation	(23,295)
Deferred charges and other	0
Total Assets	\$1,106,452
LIABILITIES AND FUND EQUITY (DEFICIENCY)	
Current Liabilities:	
Checks payable	2,277
Accounts payable	5,576
Interest payable-current	8,333
Notes payable-current	3,868
Bonds payable-current	9,417
Due to other funds	1
Reserve for insurance claims payable	0
Other current liabilities	0
Total Current Liabilities	29,472
Notes payable	64,131
General obligation bonds payable	87,270
Revenue bonds payable	319,453
Deferred credits and other liabilities	5,769
Total Liabilities	506,095
Fund Equity (Deficiency):	
Contributed Capital	517,649
Reserved for Debt Service	38,039
Retained earnings (deficit)	
Unreserved	44,669
Total Fund Equity (Deficiency)	600,357
Total Liabilities and Fund Equity (Deficiency)	\$1,106,452

The First Resolution requires the Department to maintain and keep proper books of account relating to the Wastewater System and in accordance with generally accepted accounting principles. The First Resolution also requires that within one hundred eighty (180) days after the end of each Fiscal Year the Department will cause such books of account to be audited by an independent certified public accountant. Such audit may be part of a comprehensive audit of the City and County if the Wastewater System in such audit is treated as an "enterprise fund" and the revenues and expenses of the Wastewater System are stated in a manner which permits identification by category of the sources and uses of the Revenues.

PENDING LITIGATION

In the normal course of business, claims and lawsuits are filed against the City and County and the Department and their respective officers and employees. The City and County and the Department generally are self-insured with respect to general liability claims. In the Fiscal Years ended June 30, 1999, June 30, 2000, and the first eight months of the Fiscal Year ending June 30, 2001, the Department has reached lawsuit settlements with claimants totaling \$20,058.87. There were no judgments chargeable against the Department during such period. The City and County's Corporation Counsel is of the opinion that no pending litigation will be determined so as to result individually or in the aggregate in a final judgment against the Department which would constitute a material impairment of the Department's financial position.

The Corporation Counsel reports that there is no controversy or litigation now pending or, to the best of the City and County's and the Department's knowledge, threatened, which seeks to restrain or enjoin the execution, issuance, sale or delivery of the Series 2001 Bonds or that in any way contests the validity of the Series 2001 Bonds; or any proceedings of the City and County taken with respect to the authorization, sale, or issuance of the Series 2001 Bonds, the pledge or application of any moneys provided for the payment of or security for the Series 2001 Bonds.

RATINGS

Moody's Investors Service, Inc. and Fitch, Inc. have assigned ratings of "Aaa" and "AAA", respectively, to the Series 2001 Bonds with the understanding that upon delivery of the Series 2001 Bonds, the Policy insuring the payment of the principal of and interest on the Series 2001 Bonds will be issued by the Bond Insurer. Such ratings reflect only the respective views of such organizations, and an explanation of the significance of such ratings may be obtained from the rating agency furnishing the same, at the following addresses: Moody's Investors Service, Inc., 99 Church Street, New York, New York 10007 and Fitch, Inc., One State Street Plaza, New York, New York 10004. There is no assurance that such ratings will continue for any given period of time or that they will not be revised or withdrawn entirely by such rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an effect on the market price of the Series 2001 Bonds.

UNDERWRITING

The Series 2001 Bonds are being purchased for reoffering by the Underwriters. The Underwriters have agreed to purchase the Series 2001 Bonds at an aggregate purchase price of \$134,896,862.80, plus accrued interest. The contract of purchase with respect to the Series 2001 Bonds provides that the Underwriters will purchase all the Series 2001 Bonds if any are purchased. The initial public offering prices are set forth on the inside cover page of this Official Statement. The Underwriters may offer and sell the Series 2001 Bonds to certain dealers (including depositing the Series 2001 Bonds into investment trusts) and others at prices lower than the initial public offering prices stated on the cover page hereof. The public offering prices may be changed from time to time by the Underwriters.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel, based upon an analysis of existing laws, regulations, rulings, and court decisions, and assuming, among other matters, compliance with certain covenants, interest on the Series 2001 Bonds is excluded from gross income for federal income tax purposes under

Section 103 of the Internal Revenue Code of 1986 (the "Code"), and the Series 2001 Bonds and the income therefrom are exempt from all taxation by the State or any county or other political subdivision thereof, except inheritance, transfer, estate and certain franchise taxes. Bond Counsel is of the further opinion that interest on the Series 2001 Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. A complete copy of the proposed form of the opinion of Bond Counsel for the Series 2001 Bonds is set forth in Appendix D hereto.

The amount (if any) by which the amount (excluding amounts stated to be interest and payable at least annually over the term of such Series 2001 Bonds) to be paid at maturity of any maturity of the Series 2001 Bonds exceeds the issue price of such Series 2001 Bonds constitutes "original issue discount," the accrual of which, to the extent properly allocable to each owner thereof, is treated as interest on the Series 2001 Bonds which is excluded from gross income for federal income and State of Hawaii tax purposes. For this purpose, the issue price of a particular maturity of the Series 2001 Bonds is the first price at which a substantial amount of such maturity of the Series 2001 Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the Series 2001 Bonds accrues daily over the term to maturity of such Series 2001 Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such Series 2001 Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such Series 2001 Bonds. Owners of the Series 2001 Bonds should consult their own tax advisors with respect to the tax consequences of ownership of Series 2001 Bonds with original issue discount, including the treatment of purchasers who do not purchase such Series 2001 Bonds in the original offering to the public at the first price at which a substantial amount of such Series 2001 Bonds is sold to the public.

Series 2001 Bonds purchased, whether at original issuance or otherwise, for an amount greater than their principal amount payable at maturity (or, in some cases, at their earlier call date) ("Premium Bonds") will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax exempt interest received, and a purchaser's basis in a Premium Bond, will be reduced by the amount of amortizable bond premium allocable to such purchaser. Owners of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 2001 Bonds. The County has covenanted to comply with certain restrictions designed to insure that interest on the Series 2001 Bonds will not be included in federal gross income. Failure to comply with these covenants may result in interest on the Series 2001 Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the Series 2001 Bonds. The opinion of Bond Counsel assumes compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the Series 2001 Bonds may adversely affect the value of, or the tax status of interest on, the Series 2001 Bonds. Further, no assurance can be given that pending or future legislation or amendments to the Code, if enacted into law, or any proposed legislation or amendments to the Code, will not adversely affect the value of, or the tax status of interest on, the Series 2001 Bonds. Prospective Bondholders are urged to consult their own tax advisors with respect to proposals to restructure the federal income tax.

Certain requirements and procedures contained or referred to in the Resolution, the Series Certificate providing for issuance of the Series 2001 Bonds, the Tax Certificate relating to the Series 2001 Bonds, and other relevant documents may be changed and certain actions may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. Bond Counsel expresses no opinion as to any Series 2001 Bonds or the interest thereon if any such change occurs or action is taken or omitted upon the advice or approval of counsel other than Orrick, Herrington & Sutcliffe LLP.

Although Bond Counsel is of the opinion that interest on the Series 2001 Bonds is excluded from gross income for federal income tax purposes and that the Series 2001 Bonds and the income therefrom are exempt from

taxation by the State or any political subdivision thereof, except inheritance, transfer, estate and certain franchise taxes, the ownership or disposition of, or the accrual or receipt of interest on, the Series 2001 Bonds may otherwise affect a Bondholder's federal or state tax liability. The nature and extent of these other tax consequences will depend upon the particular tax status of the Bondholder or the Bondholder's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

APPROVAL OF LEGAL PROCEEDINGS

All legal matters incident to the authorization, issuance and sale of the Series 2001 Bonds are subject to the approval of Orrick, Herrington & Sutcliffe LLP, San Francisco, California, Bond Counsel to the City and County. The form of the opinion Bond Counsel proposes to render is set forth in Appendix E hereto. Copies of the approving opinion of Bond Counsel will be available at the time of delivery of the Series 2001 Bonds. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of this Official Statement. Certain legal matters will be passed upon for the Underwriters by their counsel, McCorriston Miller Mukai MacKinnon LLP, Honolulu, Hawaii.

CONTINUING DISCLOSURE

In order to assist the Underwriters in complying with Rule 15c2-12 promulgated by the Securities and Exchange Commission ("Rule 15c2-12"), the City and County will undertake in a Master Continuing Disclosure Certificate of the City and County, as supplemented, constituting a written agreement for the benefit of the holders of the Series 2001 Bonds (the "Continuing Disclosure Certificate"), to provide to each Nationally Recognized Municipal Securities Information Repository (as referred to in Rule 15c2-12) and others, on an annual basis, certain financial and operating data concerning the Department, financial statements, notice of certain events if material, and certain other notices, all as described in the Continuing Disclosure Certificate. The undertaking is an obligation of the Department that is enforceable as described in the Continuing Disclosure Certificate. Beneficial Owners of the Series 2001 Bonds are third party beneficiaries of the Continuing Disclosure Certificate. The execution of the Continuing Disclosure Certificate is a condition precedent to the obligation of the Underwriters to purchase the Series 2001 Bonds. The form of the Master Continuing Disclosure Certificate and the proposed form of the Series Certificate for the Series 2001 Bonds are contained in Appendix D.

MISCELLANEOUS

Additional information may be obtained, upon request, from either the Department of Budget and Fiscal Services or the Department of Environmental Services of the City and County.

Reference in this Official Statement to the Act, the City Charter, the First Resolution and the Series 2001 Resolution do not purport to be complete. Refer to the Act, the City Charter, the First Resolution and the Series 2001 Resolutions for full and complete details of their provisions. Copies of the City Charter, the First Resolution and the Series 2001 Resolution are on file with the City Clerk of the City and County.

The agreements of the City and County with holders of the Series 2001 Bonds are fully set forth in the First Resolution and the Series 2001 Resolution. Neither any advertisement of the Series 2001 Bonds nor this Official Statement is to be construed as a contract with purchasers of the Series 2001 Bonds.

Any statements in this Official Statement involving matters of opinion or of estimates, whether or not expressly stated, are intended merely as expressions of opinion or estimates, and not as representations of fact, and no representation is made that any of the estimates will be realized.

The City and County's use of certain information included in this Official Statement has been furnished or reviewed and authorized by the sources described below. While the City and County believes that these sources are reliable, the City and County has not independently verified this information and does not guarantee the accuracy or completeness of the information furnished by the respective sources. The City and County is relying on certificates from certain sources, to be delivered at or prior to the time of delivery of the Series 2001 Bonds, as to the accuracy of such information provided or authorized by such sources.

The information regarding DTC and DTC's book-entry system has been furnished by DTC.

Appendix A contains extracts of the financial statements of the City and County as of June 20, 2000, relating to the Sewer Fund, together with the auditor's report thereon.

Appendix B, "Engineer's Report" has been prepared by Carollo Engineers, P.C., Consulting Engineer.

The execution and delivery of this Official Statement by the Acting Director of Environmental Services and the Director of Budget and Fiscal Services have been duly authorized by the City and County.

/s/ Caroll Takahashi

Director of Budget and Fiscal Services
City and County of Honolulu, Hawaii

/s/ Timothy E. Steinberger

Acting Director of Environmental Services
City and County of Honolulu, Hawaii

Appendix A

Extracts from Audited Financial Statements of City and County

**City and County of Honolulu
Sewer Fund**

**Financial
June 30, 2000**

Statements

PricewaterhouseCoopers	LLP
First Hawaiian Center	
999 Bishop Street, Suite 1900	
Honolulu HI 96813	
Telephone (808) 531 3400	
Facsimile (808) 531 3433	

Report of Independent Accountants

To the Chair and Members of the City Council
City and County of Honolulu
Honolulu, Hawaii

In our opinion, the accompanying balance sheet and the related statements of revenues, expenses, retained earnings and cash flows presents fairly, in all material respects, the financial position of the Sewer Fund, City and County of Honolulu, ("Sewer Fund") at June 30, 2000, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Sewer Fund's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As discussed in Note 1 to the financial statements, the financial statements of the Sewer Fund are intended to present the financial position and results of operations and cash flows of only that portion of the funds of the City and County of Honolulu that is attributable to the transactions of the Sewer Fund.

Honolulu,
February 21, 2001

Hawaii

City and County of Honolulu

Sewer Fund

Balance
June 30, 2000

Sheet

Assets	
Current Assets:	
Cash and cash equivalents (Note 3)	\$ 57,462,069
Investments (Note 3)	84,015,746
Receivables –	
Accounts (net of allowance for uncollectible accounts of \$315,484)	16,227,128
Interest	393,295
Due from other City funds (Note 4)	7,581,967
Inventories of materials and supplies	17,871,919
Total current assets	<u>183,552,124</u>
Property, Plant and Equipment, Net (Note 5)	<u>922,899,366</u>
	<u>\$ 1,106,451,490</u>
Liabilities and Fund Equity	
Current Liabilities:	
Checks payable	\$ 2,276,907
Accounts payable	5,575,442
Notes payable (Note 6)	3,867,923
Bonds payable (Note 6)	9,417,252
Interest payable	8,333,110
Total current liabilities	<u>29,470,634</u>
Notes Payable (Note 6)	64,131,492
General Obligation Bonds Payable (Note 6)	87,270,404
Revenue Bonds Payable (Note 6)	319,452,890
Deferred Credits and Other Liabilities	5,768,902
Total liabilities	<u>506,094,322</u>
Commitments and Contingencies (Note 10)	
Fund Equity:	
Contributed capital (Note 7)	517,649,362
Retained earnings –	
Reserved for debt service	38,038,611
Unreserved	44,669,195
Total retained earnings	<u>82,707,806</u>
Total fund equity	<u>600,357,168</u>
	<u>\$ 1,106,451,490</u>

The accompanying notes are an integral part of the financial statements.

**City and County of Honolulu
Sewer Fund**

**Statement of Revenues, Expenses and Retained Earnings
For the Year Ended June 30, 2000**

Operating Revenues:	
Sewer service charges	\$ 122,450,506
Other revenue	2,409,693
Total operating revenues	<u>124,860,199</u>
Operating Expenses:	
Administrative and general	31,322,926
Depreciation	23,295,362
Fringe benefits	10,156,832
Utilities	7,124,933
Contractual services	7,105,412
Fuel and lubricants	534,621
Maintenance	532,164
Materials and supplies	57,440
Total operating expenses	<u>80,129,690</u>
 Operating income	 44,730,509
Nonoperating Revenue (Expense):	
Interest revenue	7,873,051
Interest expense	(27,909,777)
Other	(268,214)
	<u>(20,304,940)</u>
 Income before operating transfers	 24,425,569
Operating Transfers In, net	<u>12,167,293</u>
 Net income	 36,592,862
Retained Earnings – Beginning of Year	<u>—</u>
Residual Equity Transfers	<u>8,076,333</u>
Retained Earnings – End of Year	<u>\$ 44,669,195</u>

The accompanying notes are an integral part of the financial statements.

City and County of Honolulu
Sewer Fund
Statement of Cash Flows
For the Year Ended June 30, 2000

Cash Flows from Operating Activities:

Operating income	\$ 44,730,509
Adjustments to reconcile operating income to net cash provided by operating activities –	
Depreciation expense	23,295,362
Other revenues	390,911
Decrease in accounts receivable	3,029,635
Decrease in due from other City funds	613,158
Increase in materials and supplies	(7,593,176)
Increase in trade accounts and checks payables	6,416,847
Decrease in other liabilities	(17,105,102)
Net cash provided by operating activities	<u>53,778,144</u>

Cash Flows from Noncapital Financing Activities:

Operating transfers in, net	<u>(2,935,341)</u>
Net cash used in noncapital financing activities	<u>(2,935,341)</u>

Cash Flows from Capital and Related Financing Activities:

Cash contribution	147,980,821
Purchase of fixed assets	(25,193,132)
Principal payments – bonds and notes	(14,756,975)
Interest paid – bonds and notes	(23,712,832)
Net cash provided by capital and related financing activities	<u>84,317,862</u>

Cash Flows from Investing Activities:

Purchase of investments	(604,432,206)
Proceeds from sale of investments	520,416,460
Interest received	6,317,150
Net cash used in investing activities	<u>(77,698,596)</u>

Net Increase in Cash and Cash Equivalents 57,462,069

Cash and Cash Equivalents, Beginning of Year —

Cash and Cash Equivalents, End of Year \$ 57,452,069

Supplemental Disclosure of Noncash Capital and Related Financing Activities –

Contribution of fixed assets and infrastructure, net of related debt of \$498,810,294 transferred from the City and County of Honolulu	<u>\$ 369,668,541</u>
--	-----------------------

The accompanying notes are an integral part of the financial statements.

1. Financial Reporting Entity

A Sewer Fund was established in 1976 pursuant to Section 14-8.1 of the 1990 Revised Ordinances of the City and County of Honolulu to account for all monies received pursuant to the provisions of the Federal Water Pollution Control Act amendments of 1972 and the Hawaii Revised Statutes and expended for the purposes authorized (operations of the City's wastewater system). The fund was operated primarily through user charges. The City and County of Honolulu (the "City") also established the Sewer Revenue Bond Improvement Fund to account for the proceeds of revenue bonds issued to pay all or part of those appropriations for improvements, repairs, and maintenance of the wastewater treatment system.

In conjunction with the November 1998 City Resolution 98-193, CD1, authorizing the issuance of the Wastewater System Revenue Bonds for the Wastewater System, a new Sewer Fund was established effective July 1, 1999 as an enterprise fund. The new Sewer Fund combines the operations of the Sewer and Sewer Revenue Bond Improvement Funds which were previously recorded in a special revenue fund and certain capital projects funds. Accordingly, various account balances, including cash and fixed assets, net of related debt, were transferred into the new Sewer Fund (the "Fund").

The accompanying financial statements present only the activities of the Sewer Fund and do not include other organizations, activities and functions of the City. Accordingly, the accompanying financial statements are not intended to present fairly the financial position of the City and the results of operations and cash flows of the City's proprietary funds.

2. Summary of Significant Accounting Policies

Basis of Accounting

The Sewer Fund uses the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when goods or services have been received or a liability has been incurred at year-end.

The Fund follows all applicable pronouncements prescribed by the Governmental Accounting Standards Board ("GASB") as well as pronouncements of the Financial Accounting Standards Board and its predecessor standard setting body, the Accounting Principles Board, that were issued on or before November 30, 1989, unless those pronouncements conflict or contradict GASB pronouncements.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash includes amounts in demand and time deposits primarily with various financial institutions in Hawaii. Cash on deposit with financial institutions is collateralized in accordance with State statutes. Investments with maturity of three months or less when purchased are considered cash equivalents.

Investments

Investments consist of government discount notes and are stated at cost, which approximates fair value.

Property, Plant and Equipment

Property, plant and equipment, including infrastructure (sewer system, network of pipes and sewer mains) are capitalized at cost. Interest cost is capitalized as part of the cost of acquiring certain assets when the effect of such capitalization is material to the financial statements. Depreciation is calculated on a straight-line basis over the following estimated useful lives:

	<u>Years</u>
Buildings and improvements other than buildings	10-50
Transmission and distribution system	13-50
Equipment and machinery	3-20

Sales and retirements of depreciable property are recorded by removing the related cost and accumulated depreciation from the accounts. Gains or losses on sales and retirements of property are reflected in results of operations.

Normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized. Betterments are capitalized and depreciated over the remaining useful lives of the related assets, as applicable.

Materials and Supplies

Materials and supplies are stated at weighted average cost.

Receivables

Sewer service charge revenues are accrued by the City based on estimated billings for services provided through the end of the current fiscal year. Estimated unbilled sewer charges amounted to approximately \$9.3 million at June 30, 2000.

Contributed Capital

Contributed capital represents assets transferred from or constructed utilizing contributions from governmental sources and recorded at cost on the date placed in service.

Retained Earnings

Reservations of retained earnings represents amounts set aside for debt service as required by the City resolution establishing the Sewer Fund. In general the reserved balance represents the maximum debt service payments due in any given fiscal year for each series of revenue bonds issued.

Residual equity transfers are nonroutine transfers of equity between the Sewer Fund and other City funds. Residual equity transfers for the fiscal year 2000 represent transfers of cash contributed to the Sewer Fund.

Retirement Plan Contributions

The City's contribution to the Employee's Retirement System of the State of Hawaii (see Note 8) is based upon actuarial computations and is comprised of the normal cost plus a level annual payment required to amortize an unfunded actuarial accrued liability over the remaining period of 19 years from July 1, 1997. The City is required by State statute to fund the actuarially determined pension contribution requirement annually.

Deferred Compensation Plan

All full-time employees of the Fund are eligible to participate in the City and County of Honolulu's Public Employees' Deferred Compensation Program (Plan), adopted pursuant to Internal Revenue Code Section 457. The plan permits eligible employees to defer a portion of their salary until future years by contributing to a fund managed by a plan administrator. The deferred compensation amounts are not available to employees until termination, retirement, death or unforeseeable emergency.

A trust fund (annuity contract) was established to protect plan assets from claims of general creditors and from diversion to any uses other than paying benefits to participants and beneficiaries. Deferred compensation plan assets are not reported in the financial statements.

It is the opinion of the City's legal counsel that the Fund has no liability for losses under the plan, but does have the duty of due care that would be required of an ordinary prudent investor.

Compensated Absences

Vacation benefits accrue at one and three-quarters working days for each month. Each employee is allowed to accumulate a maximum of 90 days of vacation as of the end of the calendar year. At June 30, 2000 accrued vacation amounted to approximately \$5.6 million.

Sick leave accumulates at the rate of one and three-quarters working days for each month, without limit. Sick leave is taken only in the event of illness and is not convertible to pay; accordingly, sick leave is not accrued. Employees who retire or leave government service in good standing with sixty or more unused sick leave days are entitled to an additional service credit in the retirement system. At June 30, 2000, accumulated sick leave, including vested and nonvested accumulated rights to receive sick leave benefits, amounted to \$15.8 million.

Operating Transfers

Operating transfers include authorized transfers of resources from the fund legally required to receive them to the Sewer Fund through which such resources are to be expended.

New Accounting Pronouncements

In June 1999, the Governmental Accounting Standards Board (GASB) issued statement No. 34, "*Basic Financial Statements - Management's Discussion and Analysis - for State and Local Governments*." Since the Sewer Fund has total annual revenues of \$100 million or more and is also an entity of the City and County of Honolulu with total annual revenues of \$100 million or more, the Sewer Fund is required to implement the Statement for the fiscal year ending June 30, 2002.

Management has not yet determined the effect of the implementation of this Statement to the Sewer Fund's financial statements but does not anticipate it will materially affect the financial statements.

3. Cash and Investments

The cash and investments balances reported in the accompanying balance sheet are included in the City's cash and investment pool that is used by substantially all of the City's funds. Information pertaining to bank and investment balances and classification of risk is available for only the total cash and investment pool. These balances were fully insured or collateralized with securities by the City's agent in the City's name.

4. Due From Other City Funds

Due from other City funds consists primarily of bond proceeds relating to bond issuances for the Sewer Fund held by the City's General Improvement Bond Fund of \$5.9 million at June 30, 2000.

5. Property, Plant and Equipment

The property, plant and equipment at June 30, 2000 was as follows:

Land	\$ 63,713,695
Buildings and improvements other than buildings	331,030,879
Transmission and distribution system	469,537,935
Equipment and machinery	19,673,876
	<hr/>
	883,956,385
Less accumulated depreciation	(23,295,352)
	<hr/>

	860,661,033
Construction-work in progress	<u>62,238,333</u>
	<u>\$ 922,899,366</u>

6. Long-Term Debt

The City issues general obligation bonds for the construction of major capital facilities. The Sewer Fund's general obligation bonds are collateralized by or expected to be paid from sewer charge revenues received. These instruments are a direct obligation of the City for which its full faith and credit is pledged. The general obligation bonds for the Sewer Fund were issued during fiscal year 1992 through fiscal year 1998 in the original amount totaling \$410.2 million and maturing serially through fiscal year 2029. The general obligation bonds bear interest at rates ranging from 4.54% to 6.25% at June 30, 2000.

Wastewater system revenue bonds were issued in two series during fiscal year 1999, in the original aggregate amount of \$319.5 million. Both series are subject to redemption, at the option of the City, on or after July 1, 2009. The bonds bear interest at 4.0% to 5.25% at June 30, 2000 and mature at various dates through fiscal year 2029.

Other Long-Term Debt

The notes payable to the Hawaii state government are for the construction of necessary treatment works and for other projects intended for wastewater reclamation or waste management. The notes amounted to \$68.0 million at June 30, 2000, bear interest ranging from 2.1 % to 3.0%, and require annual principal and interest payments through fiscal year 2019.

At June 30, 2000, the approximate maturities for general obligation bonds, revenue bonds and notes payable were as follows:

	General Obligation Bonds	Revenue Bonds	Notes Payable
Year ending June 30,			
2001	\$ 9,417,000	\$ -	\$ 3,868,000
2002	9,941,000	1,010,000	3,961,000
2003	9,855,000	1,050,000	4,056,000
2004	9,776,000	1,095,000	4,154,000
2005	9,692,000	1,140,000	4,254,000
Thereafter	<u>48,006,656</u>	<u>315,157,890</u>	<u>47,706,415</u>
	96,687,656	319,452,890	67,999,415
Less: current portion	<u>9,417,252</u>	<u>-</u>	<u>3,867,923</u>
	<u>\$ 87,270,404</u>	<u>\$ 319,452,890</u>	<u>\$ 64,131,492</u>

7. Contributed Capital

At June 30, 2000, the contributed capital represented the transfers, into the Sewer Fund at July 1, 1999:

Fixed Assets, net	\$ 433,840,532
Infrastructure, net	466,783,708
Long term debt	(498,783,708)
Cash	147,980,821
Other	<u>(32,145,405)</u>
Total contributed capital	<u>\$ 517,649,362</u>

Assets that were contributed to the Sewer Fund upon its formation were valued at their estimated cost less accumulated depreciation as of the transfer date that would have been recorded had the assets been initially recorded in this enterprise fund. Cash contributed represents the cash balances of the former Sewer and Sewer Revenue Bond Improvement funds at June 30, 1999.

8. Employee Benefit Plans

Defined Benefit Pension Plans

Plan Description - All full-time employees of the City are eligible to participate in the Employees' Retirement System of the State of Hawaii (ERS), a cost-sharing multiple-employer defined benefit pension plan. The ERS was established by Chapter 88 of the Hawaii Revised Statutes (HRS) and is governed by a Board of Trustees. All contributions, benefits and eligibility requirements are established by Chapter 88, HRS, and can be amended by legislative action.

The ERS is composed of a contributory retirement plan and a noncontributory retirement plan. Prior to June 30, 1984, the plan consisted of only a contributory option. In 1984, legislation was enacted to create a new noncontributory option for members of the ERS who are also covered under social security. Persons employed in positions not covered by social security are precluded from the noncontributory option. The noncontributory option provides for reduced benefits and covers most eligible employees hired after June 30, 1984. Employees hired before that date were allowed to continue under the contributory option or to elect the new noncontributory option and receive a refund of employee contributions. Both plans provide death and disability benefits and cost-of-living increases. In the contributory plan, employees may elect normal retirement at age 55 with 5 or 10 years of credited service or elect early retirement at any age with 25 years of credited service. Such employees are entitled to retirement benefits, payable monthly for life, of 2% or 2.5% of their average final salary, as defined for each year of credited service with certain limitations. Benefits fully vest on reaching 5 years of service; retirement benefits are reduced for early retirement. In the noncontributory plan, employees may elect normal retirement at age 62 with 10 years of credited service or at age 55 with 30 years of credited service, or elect early retirement at age 55 with 20 years of credited service. Such employees are entitled to retirement benefits, payable monthly for life, of 1.25% of their average final salary, as defined, for each year of credited service. Benefits fully vest on reaching 10 years of service; retirement benefits are reduced for early retirement.

The ERS issues a Comprehensive Annual Financial Report that may be obtained by writing to the Employees' Retirement System of the State of Hawaii, 201 Merchant Street, Suite 1400, Honolulu, Hawaii 96813.

Funding Policy - All funding requirements are established by Chapter 88, HRS, and can be amended by the State legislature. Covered contributory plan employees are required to contribute 7.8% or 12.2% of their salary to the plan; the City is required to contribute the remaining amounts necessary to pay contributory plan benefits when due. The City is also required to contribute all amounts necessary to pay noncontributory benefits when due. The City's contribution requirements are actuarially determined based on actuarial assumptions established by Chapter 88, HRS. The Sewer Fund's contribution to the ERS for the fiscal year ended June 30, 2000 was \$281,000, which was equal to the required contributions for the year.

Post-Retirement Health Care and Life Insurance Benefits

In addition to providing pension benefits, the State of Hawaii Public Employees Health Fund provides certain health care (medical, prescription, vision and dental) and life insurance benefits for retired City employees. Contributions are based on negotiated collective bargaining agreements and are limited by State statute to the actual cost of benefit coverage. Prior to July 1, 1996, the City paid for 100% of these benefits for employees who have at least 10 years of service. According to Act 217, SLH 1995, employees hired after June 30, 1996 with 25 years or more of service receive 100% employer funding. The City's

share of the cost of these benefits is prorated for employees with less than 25 years of service. The City also reimburses 100% of Medicare expenses for retirees and qualified dependents (through the State) who are at least 65 years of age and have at least 10 years of service. Currently, approximately 8,767 retirees and qualified dependents are receiving post retirement health care and benefits paid for by the City. The City's contributions for post retirement benefits, which are funded as accrued, amounted to \$25.9 million for the fiscal year ended June 30, 2000. Separate information for the Sewer Fund is not available.

Early Retirement Incentive

Act 212 of the 1994 regular session of the State legislature authorized an early retirement incentive to state and county employees with at least 25 years of service as of December 31, 1994. Qualifying employees received two additional years of service credits for purposes of calculating their retirement benefits. 571 City employees received early retirement benefits, which cost the City \$7.5 million in payouts for accrued vacation during fiscal 1995. Act 216 of the 2000 regular session of the State legislature changed the funding period for the cost of the early retirement incentive bonus from five years to nineteen years retroactive to June 30, 1997. Based on the per-employee analysis of additional retirement contributions calculated by the ERS, the additional retirement contribution, including interest, to be paid by the City is \$20.3 million. Separate information for the Sewer Fund is not available.

9. Management Agreement

The City and County of Honolulu has an agreement with the Board of Water Supply (the "Board") to provide certain services through June 30, 2004 relating to the billing and collection of sewer service charges. Fees related to these services were negotiated at approximately \$100,000 in 2000. Fees will be renegotiated for the remaining years of the contract based on a study of the incremental costs incurred by the Board to provide these services.

10. Commitments and Contingencies

The Sewer Fund has contractual commitments of approximately \$113 million at June 30, 2000, primarily for construction contracts.

Litigation

The City is a party to various legal proceedings arising in the normal course of business. Some of these matters relate to the Sewer Fund as follows:

Clean Water Act

In 1991, the EPA filed an administrative action against the City alleging violations of the Clean Water Act and conditions and limitations of the National Pollutant Discharge Elimination System Permits by failing to develop and administer pretreatment programs for all of its treatment plants and for unauthorized discharges from the collection system. As a result of a settlement reached between the EPA and the City, a consent decree has been filed which requires certain compliance actions and penalties of \$1.2 million, which were paid in fiscal year 1995. The City has implemented certain compliance actions such as developing plans, providing additional positions and training and contracting various services for the rehabilitation and maintenance of the collection system and implementation of the plans. The City has committed to spend at least \$20 million for effluent reuse, for which planning and development is currently underway. The expected date of completion is July 2001. The City has also committed to spend at least \$10 million for sludge reuse which is currently undergoing deadline negotiations. The consent decree cites potential stipulated penalties of \$2,000 per day per violation for failure to comply.

The State and certain environmental groups (nonprofit organizations) also filed actions against the City for declaratory judgment, injunctive relief and civil penalties for violations of the Clean Water Act for the Honouliuli, Kailua and Kaneohe wastewater treatment plants for failing to meet the secondary treatment requirements and for operating the Wahiawa wastewater treatment plant without a permit.

Honouliuli - The City was cited for numerous bypass events from the Honouliuli plant in December 1989. Effluent limits are being met and the City is operating under an administrative extension of the old permit. The Environmental Services Department is working with the State Department of Health and has closed out the Consent Order as of February 1999.

The City was cited and fined \$174,000 for exceeding the limit on the ground water use permit at the Honouliuli plant in June 1997. On May 20, 1998, the State Commission on Water Resource Management withdrew its notice of violation without prejudice, subject to the City providing quarterly reports, which indicate the progress made on the effluent reuse project. If the reports are not submitted, the fine may be reinstated by the State.

Kailua and Kaneohe - As a result of a settlement reached between the parties, a consent decree has been filed for the Kailua and Kaneohe plants, which requires certain compliance actions such as developing a facilities plan, constructing a feasible ultraviolet disinfection facility and establishing and supporting an advisory council. The conceptual facilities plan and the environmental impact statement preparation notice were completed in September 1998. The design phase of the ultraviolet disinfection project was completed in October 1998. Responses to public comments were completed in June 1999. The City has contracted a construction company to complete the construction phase for approximately \$2.3 million, which was completed in November 2000. Approximately \$1.2 million has been paid as of June 30, 2000 related to these compliance actions. The Kailua Bay Advisory Council was established in October 1995. The City has established a \$2.1 million trust fund; hired a program administrator and a third party to provide watershed mapping services; awarded grant projects to four community groups; developed short-term implementation plans for erosion control initiatives, stream bank restoration and refuse control; and developed a web site for the Kailua Bay Advisory Council to disseminate information to the public.

The consent decree cites total costs of at least \$7.4 million for capital improvements, consulting and other fees. The consent decree cites stipulated penalties of \$500 per day per violation for failure to meet the specified obligations and deadlines. The City has not been assessed any penalties, as the specified obligations and deadlines were met during 1999. The Kaneohe treatment facility has been converted into a temporary treatment facility.

Wahiawa - A civil action was filed by the State for operating the Wahiawa plant without a permit. Settlement with the State was reached and a consent decree was approved on February 27, 1998. The consent decree requires the City to upgrade the existing treatment plant to produce water suitable for reuse and adjust the outfall. The estimated cost of the upgrades is approximately \$12.3 million. The consent decree cites stipulated damages of \$600,000 plus \$1,000 - \$5,000 per day if the upgrades are not completed by February 27, 2001.

Whitmore Village - The State issued a notice of violation and order for exceeding, biological oxygen demand and total suspended solid limits at various times from May to December 1992. The case is pending review and a ruling has not been made. The State may impose penalties not to exceed \$10,000 per day per violation. Potential fines could approximate \$1.5 million. The City has terminated the treatment and disposal of wastewater at this facility in March 1994.

Kahuku - The State issued a notice of apparent violation resulting from discharge of chlorinated secondary filtered effluent from an effluent pipe break at the Kahuku Wastewater Treatment Plant onto private property. The City has not been assessed any penalties, however, corrective action is estimated at \$750,000.

Although the outcome of individual matters is not predictable, no provision for any liability that may result from these lawsuits has been made in the Sewer Fund's financial statements since any such liabilities are normally paid from the City's General Fund. In the opinion of management, the final outcome of these matters is unknown at this time but should not have a material adverse effect on the Sewer Fund's financial statements.

Appendix B
Engineer's Report

City and County of Honolulu

2001 WASTEWATER SYSTEM REVENUE BONDS

ENGINEER'S REPORT

June 29, 2001



City and County of Honolulu

2001 WASTEWATER SYSTEM REVENUE BONDS
ENGINEER'S REPORT

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City and County of Honolulu
2001 WASTEWATER SYSTEM REVENUE BONDS
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GLOSSARY

REFERENCE

City and County of Honolulu

2001 WASTEWATER SYSTEM REVENUE BONDS ENGINEER'S REPORT

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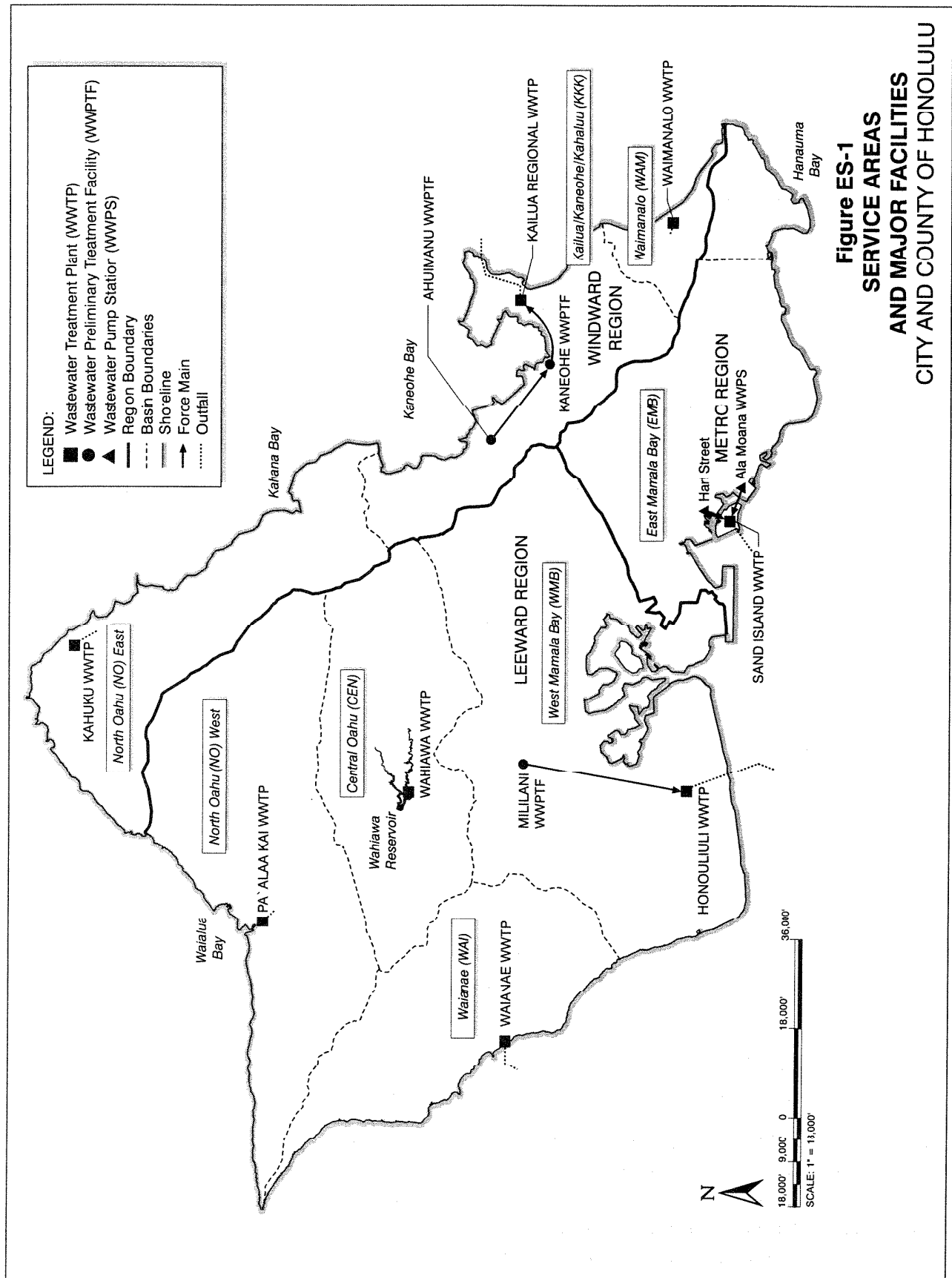
EXECUTIVE SUMMARY**1.1 INTRODUCTION AND BACKGROUND****Overview of Existing Wastewater Facilities**

The City and County of Honolulu's Department of Environmental Services ("Department") is responsible for the operation, maintenance, compliance monitoring, facility planning and programming, and fiscal planning and execution for the City's wastewater system.

The wastewater systems service approximately 130,000 separate accounts and a population of approximately 600,000 of the island of Oahu's total population of approximately 845,000. The customer base includes the residential population, businesses and industries, and other users located in the 500-square-mile service area. Out of 130,000 accounts, approximately 123,000 are residential and represent approximately 77.8 percent of the total revenue from sewer service charges. The remaining 7,000 are non-residential and represent approximately 22.2 percent of the total revenue from sewer service charges.

The island of Oahu, which constitutes the City and County of Honolulu, is divided into eight wastewater basins: Central Oahu, East Mamala Bay, Kailua/Kaneohe/Kahaluu, North Oahu (East), North Oahu (West), Waianae, Waimanalo, and West Mamala Bay. Each basin is served by a major wastewater treatment plant (WWTP). The basins and the associated WWTP's are shown in Figure ES-1 and listed in Table ES-1.

Table ES-1 Wastewater Drainage Basins and Major Facilities City and County of Honolulu Department of Environmental Services			
Region	Basin	WWTP	Discharge Location
Metro	• East Mamala Bay	• Sand Island	• Ocean
Leeward	• West Mamala Bay	• Honouliuli	• Ocean/Reuse
	• North Oahu (West)	• Pa'alaa Kai	• Injection Wells
	• Waianae	• Waianae	• Ocean
	• Central Oahu	• Wahiawa	• Reservoir
Windward	• Kailua/Kaneohe/Kahaluu	• Kailua Regional ⁽¹⁾	• Ocean
	• North Oahu (East)	• Kahuku	• Injection Wells
	• Waimanalo	• Waimanalo	• Injection Wells
Notes: ⁽¹⁾ Includes Ahuimanu and Kaneohe Wastewater Preliminary Treatment Facilities WWTP = Wastewater Treatment Plant			



Over 90 percent of the wastewater flows are treated by the three largest facilities: the Sand Island WWTP, which treats 67.6 million gallons per day (mgd) of average dry weather flow (ADWF) from Honolulu, the Honouliuli WWTP, which treats 26.8 mgd ADWF from the Ewa, Mililani, and Pearl Harbor areas, and the Kailua Regional WWTP, which treats 13.0 mgd ADWF from the eastern populated areas of the island.

Compliance with Discharge Requirements

Seven out of the eight WWTPs are owned by the City and County of Honolulu, and operated by the Department. All City and County-owned WWTPs currently meet national and state discharge requirements except for the Sand Island WWTP. The Sand Island WWTP has recently experienced some difficulties in meeting the new 30 percent biological oxygen demand (BOD) removal limit set forth in the revised discharge permit. Many of the upcoming projects are designed to fix problems at this facility. The eighth WWTP, the Waimanalo WWTP, which accounted for only 0.5 percent of the total wastewater flows in the year 2000, is owned by the State of Hawaii and operated by the Department. The Waimanalo WWTP has not consistently met discharge requirements in the past. The plant exceeded monthly average permit concentrations for BOD in June of 1997 and for total suspended solids (TSS) in July of 1997.

The community of Honolulu highly values a clean environment. The Department has worked with the community, the EPA, and the State of Hawaii Department of Health to develop several consent decrees. The consent decrees reflect agreed upon actions to meet the objectives of the City and County of Honolulu, the EPA, and other major participants for improvements to the existing wastewater systems. The consent decrees confirm the overall direction and schedule for the wastewater management program.

Organization of the City and County of Honolulu Wastewater Enterprise

The City and County of Honolulu's Department of Environmental Services is responsible for the operation, maintenance, compliance monitoring, facility planning and programming, for the City's wastewater system.

The Department is composed of approximately 590 employees in support of the wastewater program. The Office of Administrative Support provides fiscal control, personnel support, and Capital Improvement Plan ("CIP") program development activities. The Division of Wastewater Treatment and Disposal and the Division of Collection System Maintenance provide operation and maintenance of the treatment plants, pump stations, and the collection system. The Division of Environmental Quality provides performance monitoring, source control, and laboratory services. An additional 400 employees support the solid waste collection and disposal program.

The Department of Environmental Services was created July 1, 1998 as part of a City-wide reorganization to streamline operations. Previously, the Department of Wastewater Management, created by a City Charter change effective July 1, 1993, provided operation, maintenance, planning, design and construction of City wastewater facilities. Prior to that time, wastewater management was a division under the Department of Public Works.

The City's Department of Design and Construction provides wastewater facility planning, design and construction in support of the Department. Wastewater permitting is consolidated in the City's Department of Planning and Permitting to provide one stop permitting service to customers and better relate approval of development plans with City-wide planning.

Capital Program Planning and Future Direction

The Department has developed a comprehensive long-term planning program for wastewater management which has led to the completion of facility plans and preliminary designs for most of the major wastewater facilities on the island. The facility plans for the individual WWTPs are incorporated in the 20-year CIP which covers the years ranging from FYE 1998 to FYE 2017.

The Department retains the responsibility for insuring that appropriate planning for the future continues as the program is executed, modified and planned beyond the 20-year period.

Wastewater Flow Projections

The wastewater flow and strength projections are based on the anticipated growth rates included in the City and County of Honolulu's Development Plans and Sustainable Community Plans. Growth is not a significant factor in driving the overall need for 20-year CIP projects. Only 14 percent of the 20-year CIP costs are associated with projects that are required to accommodate growth.

1.2 2001 - 2005 CIP PROJECTS

Need for the 2001-2005 Projects

The 2001-2005 CIP projects which are part of the overall 20-year program fall into two general categories: collection system, and wastewater treatment plant. The need for projects in each category is summarized below.

Collection System Improvement Projects

Collection system improvement projects are the highest priority projects due to deteriorated and corroded pipe conditions that have resulted in excessive infiltration, inflow, and overflows during wet weather conditions. Replacement of severely corroded pipe will reduce infiltration/inflow during wet weather events, will result in lower operation and maintenance costs for both the collection systems and associated WWTPs, and will significantly reduce the risk of Clean Water Act violations owing to system overflows resulting from infiltration/inflow.

The Department has planned for the design or construction of numerous collection system improvement projects between fiscal years ending 2001 and 2005. The large number of collection system improvement projects are largely a result of a comprehensive Infiltration/Inflow (I/I) plan completed in December 1999 and approved by EPA. The total expenditures (in inflated dollars) for these projects through the year 2005 are \$368.4 million, with an expected \$175.5 million to be expended within the first three years and \$192.9 million to be expended in the remaining two years.

Collection system projects between fiscal years ending 2001 and 2005 include the Wilhelmina Rise Sewer Rehabilitation, the Kalaheo Avenue Sewer Reconstruction, and many other projects including ones that stem from the I/I Plan.

Wastewater Treatment Plant Improvement Projects

The WWTP improvement projects are needed to upgrade existing facilities to satisfy regulatory requirements, to improve the ability of the facilities to handle peak wet weather flows, and in some cases to accommodate growth. The Department has planned for the design and/or construction of 11 WWTP improvement projects with all WWTP expenditures (in inflated dollars) totaling approximately \$403.6 million between fiscal years ending 2001-2005. Within the first three years, \$110.4 million is to be expended and approximately \$293.2 million is to be expended in the remaining two years. Projects between fiscal years ending 2001-2005 include the Sand Island WWTP Unit 1 Phase 2A Project, Sand Island WWTP Primary Treatment Expansion, Sand Island WWTP Disinfection and Effluent Pump Station Projects.

Project Management

The Department uses a combination of professional engineering staff and specialty subcontractors to provide construction management services. In-house permanent staff is leveraged by hiring outside project staff on an as-needed basis to support project activities.

Summary of Estimated Project Costs

The summary of costs for 2001-2005 CIP projects by project category is presented in Table ES-2. These costs include planning, design, and construction costs as well as all engineering, administrative, and legal expenses. The City and County of Honolulu 2001 Senior Lien Revenue Bonds (referred to herein as the "Series 2001 Bonds") with construction proceeds totaling approximately \$125 million will partially finance the 2001-2005 CIP projects, with the balance to be primarily met from existing funds of the Department, annual revenues, State Revolving Loan (SRF) proceeds, and from the proceeds of future revenue bond issues.

Table ES-2 Summary of Estimated CIP Project Expenditures, 2001-2005 City and County of Honolulu Department of Environmental Services							
Project	(Thousands of Dollars)⁽¹⁾					Total Expenditures	
	Fiscal Year						
	00/01	01/02	02/03	03/04	04/05	00/01-02/03	00/01-04/05
Collection System Projects							
Consent Decree Projects	\$20,011	\$25,912	\$40,105	\$41,477	\$46,333	\$86,028	\$173,839
Other Non-Discretionary Projects	18,056	24,294	23,497	28,860	28,096	65,847	122,803
Other Discretionary Projects	7,381	6,882	9,349	17,785	30,337	23,611	71,733
Subtotal: Collection System	\$45,448	\$57,088	\$72,951	\$88,122	\$104,767	\$175,486	\$368,376
Treatment Plant Projects							
Consent Decree Projects	\$9,303	\$4,135	\$2,861	\$1,014	\$428	\$16,298	\$17,740
Other Non-Discretionary Projects	5,013	19,881	66,642	135,647	149,430	91,536	376,613
Other Discretionary Projects	577	344	1,612	3,414	3,320	2,533	9,266
Subtotal: Treatment Plant	\$14,892	\$24,359	\$71,115	\$140,075	\$153,179	\$110,367	\$403,620
Total: CIP	\$60,340	\$81,447	\$144,067	\$228,197	\$257,945	\$285,854	\$771,996
Notes:							
(1) All costs are presented in inflated dollars, assuming 3% inflation per year, beginning in Fiscal Year 02/03.							

1.3 FUTURE PROJECTS

Long-Term Expansion and Rehabilitation Needs

A summary of the 20-year CIP total costs by project category is provided in Figure ES-2. Approximately 69 percent of the total project costs are associated with collection system improvements, and 31 percent with WWTP improvements. The 20-year expenditure total presented in figure ES-2 is in FY 2001 dollars.

A summary of the 20-year CIP total cost by primary project purpose is presented in Figure ES-3. As shown in Figure ES-3, approximately 81 percent of the total costs are associated with non-discretionary projects that must be completed in order to satisfy consent decree, permit/regulatory, expansion, and safety/public health requirements. The remaining 19 percent of the total costs are associated with discretionary projects that have been identified to improve wastewater treatment and collection systems. The Department has identified these discretionary projects in order to address reliability, improvement, and preventive maintenance concerns. The 20-year expenditure total presented in figure ES-3 is in FY 2001 dollars.

20-year expenditure total = \$2.1 Billion

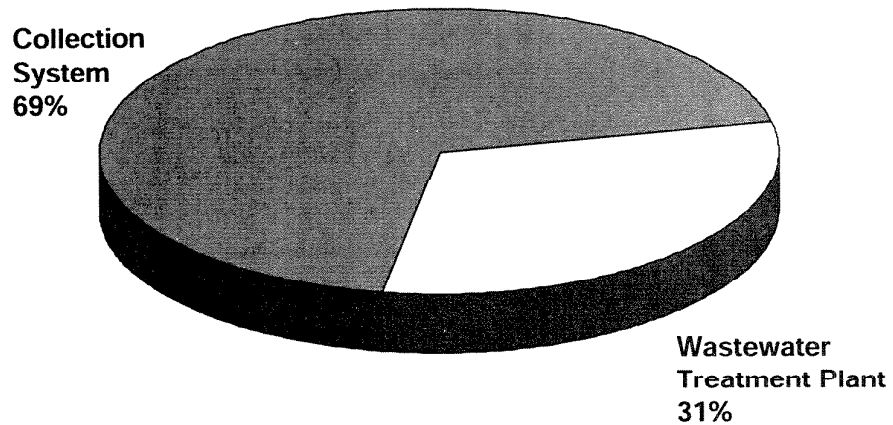


Figure ES-2
20-YEAR CIP BY PROJECT CATEGORY
CITY AND COUNTY OF HONOLULU

20-year expenditure total = \$2.1 Billion

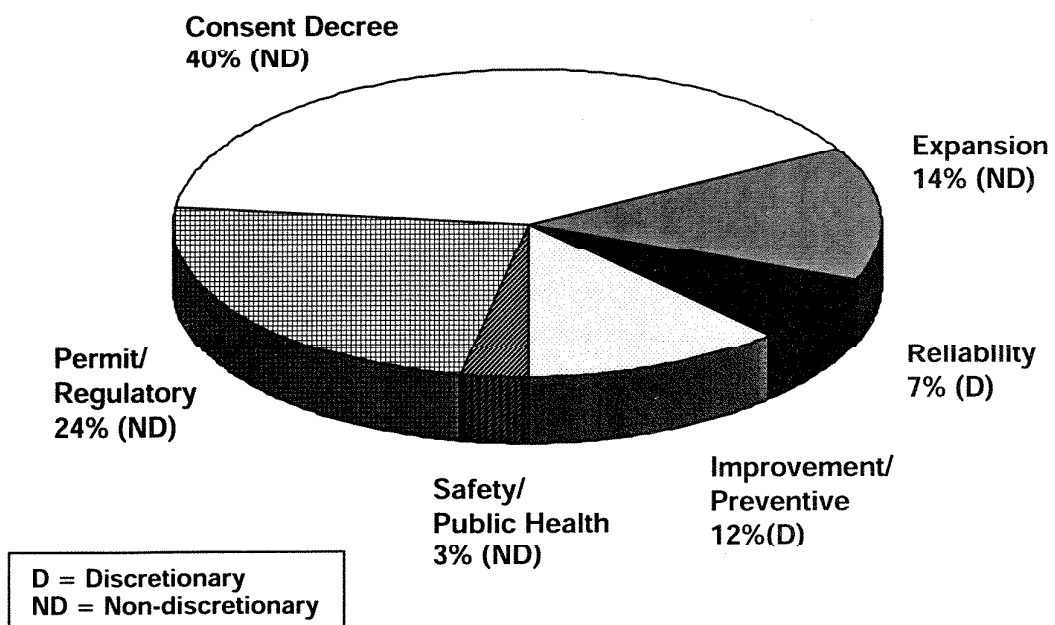


Figure ES-3
20-YEAR CIP BY PROJECT MAIN PURPOSE
CITY AND COUNTY OF HONOLULU

Cost of CIP Projects

Estimated capital project costs for future facilities have been developed for each of the eight wastewater basins. The capital cost estimates include land acquisition, planning, design, construction, construction management, and all other costs required to deliver a completed project.

Timing of CIP Projects

An implementation schedule for the 20-year CIP projects has been developed, which includes the timing of major CIP projects necessary to accommodate increased wastewater flows and loadings due to anticipated growth, to meet consent decree scheduled activities, and for replacement and rehabilitation needs. Some of the 2001 - 2005 CIP projects are already funded through planning and design and construction. Others will be funded from the proceeds of the Series 2001 Bonds, the existing capital reserves, annual revenues, SRF loan proceeds, and future bond issues.

Growth Rate Considerations

The cost of projects that are required to accommodate growth in population and from expansions into unsewered areas is projected to be only 13 percent of the 20-year CIP total costs. Most of the projects in the CIP are driven by factors other than growth such as consent decree requirements, rehabilitation and replacement of existing aging infrastructure, and public safety.

1.4 CURRENT AND FUTURE SEWER SERVICE AND SYSTEM FACILITY CHARGES

Sources and Uses of Funds

The Department's revenues are currently derived from three major sources: monthly sewer service charges, system facility charges (i.e., one time charges for new connections), and interest earned on fund balances. Of these sources, sewer service charges are the major source of revenue.

Existing Rates and Charges

The current sewer service charge for single-family residences is approximately \$33.35 per month. Sewer service charges have been held constant since July 1, 1993. New connections have averaged approximately 2,400 equivalent single-family dwelling units (ESDUs) per year over the past ten years, although over the past five years the average has decreased to approximately 1,700 ESDUs per year. System facility charges have been held constant at \$1,146 per ESDU since 1991-1992.

Projected Rates and Charges

Sewer service charges and system facility charges are projected to increase beginning in fiscal year ending 2004 to accommodate the needs of the capital improvement program and operation and maintenance requirements.

1.5 SUMMARY OF PROJECTED REVENUES AND EXPENSES

A ten-year financial projection through fiscal year ending 2010 for the Department's operations has been prepared and is presented in Table ES-3. As shown in Table ES-3, sewer service charges are projected to continue to be the major source of revenues.

The City Council has adopted a set of Debt and Financial Policies for its wastewater system that target, among other things, the City and County to maintain a 1.60 times coverage for its Senior Revenue Bonds and 1.25 times coverage for all Revenue Bonds (Senior and Junior). The City and County has adhered to the Debt and Financial policies in the previous years and has met all stated goals. It is expected that the City and County will adopt increases in sewer services charges necessary to meet the debt service coverages prescribed in its Debt and Financial Policies.

Current projections show that the debt service coverages will be achieved by: 1) increasing sewer service charges between 6.0 and 12.0 percent annually beginning in fiscal year ending 2004, and 2) increasing system facility charges 3 percent annually beginning in fiscal year ending 2004. The City and County's historical rates are reasonable and have not increased since 1993. The City and County's past practice of periodic larger increases followed by extended periods of stable rates as compared to gradual yearly increases is common to other wastewater agencies.

1.6 CONCLUSIONS

Based upon our studies, the assumptions discussed in this report and our review of the data and analysis provided by the City and County of Honolulu and its consultants, we conclude the following:

Compliance with Discharge Requirements

All City and County owned WWTPs are currently meeting national and state discharge requirements except for the Sand Island WWTP. Recently, the Sand Island WWTP plant has experienced difficulties in meeting the 30 percent BOD reduction requirement. The 2001-2005 CIP Projects implement the modifications required to fix other existing deficiencies, and to accommodate planned growth, as well as projects required by and identified in the new discharge permit.

The City and County of Honolulu's Wastewater System collection and pumping facilities do not meet all the current and anticipated federal and state regulatory requirements, and will require additional capacity necessary to serve the projected growth in the service area. The programs are outlined in the I/I plan as well as other collection system projects and are included in the CIP.

20-Year CIP

An estimated \$1.71 billion of non-discretionary CIP project expenditures for various treatment, collection and other facilities are required to be constructed during the 20-year CIP program. This is to eliminate the current and projected critical deficiencies, to meet consent decree milestones, and to provide a wastewater system in a satisfactory operating condition based on projected wastewater usage and environmental and other regulatory requirements. The remaining

approximately \$0.39 billion of CIP projects are discretionary, and have been identified primarily to improve wastewater treatment and collection systems efficiency. These CIP project expenditures are to be funded from proceeds of bonds, including the Wastewater Revenue Bonds, Series 2001 Bonds, and from net revenues and other charges.

The \$2.1 billion of CIP expenditure is technically sound and conforms with good engineering practice and the estimated total costs of the CIP have been realistically assessed.

2001-2005 CIP Projects

The 2001-2005 CIP projects fall into two general categories: collection system and wastewater treatment plant. The majority of the projects scheduled for this period are collection system projects, including pipelines and pump stations. The collection system improvement projects are needed to replace or rehabilitate corroded pipe, to reduce infiltration/ inflow, and to extend service to unsewered areas. Replacement of severely corroded pipe will reduce infiltration/inflow during wet weather events, and will result in lower operation and maintenance costs for both the collection systems and associated WWTPs. The collection system projects are described in Section 3.2.

Treatment plant improvement project expenditures anticipated during FYE 2001-2005 are needed to upgrade existing facilities, to satisfy regulatory requirements, and to improve the reliability of the facilities in handling peak wet weather flows. WWTP improvement projects are described in Section 3.3.

Department Management

The operations of the wastewater system are directed by a professional staff for the disciplines of operations specialists, maintenance (including electrical, instrumentation and mechanical), laboratory personnel and other technical support personnel.

Financial Projections

The financial projections with respect to the wastewater system are based on reasonable and conservative assumptions and should fairly reflect the financial performance of the wastewater system. The projected 10-year cash flow is shown in ES-3.

Current customer rates and charges for the City and County of Honolulu compare favorably to other similar wastewater agencies. In the past, projected customer rates and charges were based on periodic larger increases followed by extended periods of stable rates. Given the capital intensive period the City and County is entering, the future sewer service charges will be increasing over this period to accommodate these capital expenditures. The past and current rate setting philosophy results in projected rates and charges which are reasonable when compared on an equivalent annual basis.

In the opinion of Carollo Engineers, projected sewer service and system facility charges will provide revenue sufficient to:

- Meet all projected costs of operation, maintenance and routine replacement of sewer system facilities.

- Meet the existing debt service obligations and the projected requirements for the Series 2001 Bonds and future bond issues.
- Provide sufficient revenue to pay the costs of the City and County of Honolulu's CIP through the end of the forecast period.
- Meet reserve requirements of bond resolution.

The funds obtained from the sale of the Series 2001 Bonds, current cash reserves, fees collected over the next few years, and future bond issues will be adequate to fund the current projects.

The rate at which growth occurs will not affect the ability of the City and County of Honolulu to meet its debt obligations because the growth is a small component of the overall costs and revenues associated with the financial projections. In general, many of the CIP projects are necessary and must proceed based on consent decree requirements and public safety and health concerns with or without any additional connections.

This report has been prepared at the request of the City and County of Honolulu for appending to the Official Statements relating to the issuance of the Series 2001 Bonds. The conclusions, observations, and recommendations contained herein constitute only the opinions of Carollo Engineers. The various background documents, statements and other information supplied by the City and County of Honolulu, its employees, and other consultants have been relied upon as being accurate in the performance of these analyses. However, no assurances are given nor warranties implied by Carollo as to the accuracy of such information. Carollo makes no certification and gives no assurances except as explicitly set forth in this report.

Table ES-3 10-Year Projected Cash Flow Summary
City and County of Honolulu Department of Environmental Services

(Revenue and Expense Numbers in Millions)

(Fiscal Year Ending June 30)

Fiscal Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
Growth Assumptions											
Total ESDUs at Start of Year	279,963	281,272	282,729	284,186	285,643	287,100	288,558	290,015	291,472	292,929	
Total New ESDUs Added	1,309	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	14,424
Revenues											
Sewer Service Charges ⁽¹⁾	\$111.3	\$111.2	\$112.6	\$125.6	\$141.4	\$159.2	\$177.6	\$195.4	\$212.1	\$226.0	\$1,572.4
System Facility Charges ⁽¹⁾	1.5	1.7	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.1	18.0
Interest on Sewer Reserve Fund and Unreserved Fund ⁽¹⁾	1.9	5.7	4.2	4.6	5.0	5.4	5.5	5.8	6.1	6.7	50.9
Other Revenues ⁽²⁾	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.1	0.1	0.1	6.7
TOTAL REVENUES	\$115.7	\$119.5	\$119.3	\$132.8	\$149.0	\$167.3	\$185.9	\$203.3	\$220.3	\$234.8	\$1,647.9
Operating Expenses											
O&M Costs ⁽³⁾	\$66.4	\$71.3	\$69.7	\$77.4	\$77.4	\$80.2	\$83.2	\$86.6	\$89.6	\$92.7	\$794.6
TOTAL EXPENSES	\$66.4	\$71.3	\$69.7	\$77.4	\$77.4	\$80.2	\$83.2	\$86.6	\$89.6	\$92.7	\$794.6
TOTAL NET REVENUES	\$49.2	\$48.2	\$49.7	\$55.5	\$71.6	\$87.1	\$102.7	\$116.6	\$130.7	\$142.1	\$853.4
Debt Service											
2001 Sr. Bonds and Future Sr. Revenue Bond Debt Service	\$0.0	\$3.8	\$9.3	\$16.5	\$27.9	\$47.4	\$57.6	\$67.4	\$76.2	\$83.4	\$389.6
Previous Sr. Revenue Bond Debt Service	2.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	34.6
Future Jr. Revenue Bond Debt Service	0.0	0.0	0.3	1.0	1.9	3.3	4.3	5.2	6.0	6.7	28.7
Previous Jr. Revenue Bond Debt Service	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	12.3	14.1	110.2
Reimbursable G.O. Debt Service	13.2	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.8
SRF Loans (Existing and Future)	7.6	7.9	8.6	9.3	10.0	10.7	11.4	12.0	12.7	13.4	103.6
Total Debt Service	\$34.8	\$31.4	\$33.3	\$41.9	\$54.8	\$76.4	\$88.3	\$99.6	\$110.8	\$121.3	\$692.6
TOTAL NET REVENUES AVAILABLE FOR OTHER REQUIREMENTS	\$14.4	\$16.8	\$16.4	\$13.6	\$16.8	\$10.6	\$14.4	\$17.0	\$19.9	\$20.9	\$160.8
Sr. Revenue Bond Coverage Ratio ⁽⁴⁾	18.55	6.35	3.72	2.67	2.22	1.67	1.65	1.62	1.61	1.61	
Total Revenue Bond Coverage Ratio ⁽⁴⁾	3.40	2.47	1.95	1.65	1.56	1.30	1.31	1.31	1.31	1.30	
Total Debt Coverage Ratio ⁽⁴⁾	1.37	1.48	1.44	1.28	1.27	1.12	1.14	1.15	1.16	1.16	
Capital Project Financing											
Transfer to CIP from sewer fund	\$12.7	\$9.6	\$9.9	\$10.0	\$11.0	\$12.0	\$11.8	\$14.9	\$13.0	\$12.2	\$117.0
SRF Loan Proceeds	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	\$100.0
Net Revenue Bond Proceeds	0.0	185.0	180.0	200.0	140.0	130.0	130.0	100.0	90.0	95.0	\$1,250.0
Interest on CIP Project Fund	2.1	0.3	6.5	9.6	9.6	5.3	4.4	4.7	4.0	2.9	\$49.4
Net CIP Financing	\$24.8	\$204.9	\$206.4	\$229.6	\$170.6	\$167.3	\$156.2	\$129.6	\$117.0	\$120.1	\$1,516.4
Capital Expenditures											
Capital Expenditures	\$60.3	\$81.4	\$144.1	\$228.2	\$257.9	\$175.0	\$149.1	\$143.4	\$139.6	\$129.1	\$1,508.3
Purchase of existing assets ⁽⁵⁾		\$41.0									
Major Reserves & Funds (end of year)											
Unrestricted Reserve Balance	\$97.1	\$66.1	\$75.3	\$79.8	\$88.6	\$90.0	\$95.5	\$100.5	\$110.6	\$122.9	
Sewer Fund Reserve ⁽⁶⁾	\$16.6	\$17.8	\$17.4	\$19.3	\$19.4	\$20.1	\$20.8	\$21.7	\$22.4	\$23.2	
CIP Project Fund	\$5.6	\$129.1	\$191.5	\$192.8	\$105.5	\$87.8	\$94.0	\$81.0	\$58.4	\$49.4	
Projected Charges Required											
Monthly Sewer Service Charge ⁽⁷⁾⁽⁸⁾	\$33.27	\$33.18	\$33.18	\$36.83	\$41.25	\$46.20	\$51.29	\$56.16	\$60.65	\$64.29	
Increase Over Prior Year	-0.24%	-0.26%	0.0%	11.0%	12.0%	12.0%	11.0%	9.5%	8.0%	6.0%	
System Facility Charge	\$1,146	\$1,146	\$1,146	\$1,180	\$1,215	\$1,251	\$1,289	\$1,328	\$1,368	\$1,409	
Increase Over Prior Year	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	

Notes:

- (1) Revenues from Sewer Service Charges, Facility Charges and Interest are as budgeted for 2001 - 2002. For 2003 and beyond revenues are calculated values.
- (2) Includes cesspool pumping, connection services, lateral installation, misc. state funding, and other revenues.
- (3) Includes all operating expenses: salaries, non-salary personnel costs, administrative support, equipment, general fund rental and other expenses.
- (4) Revenues for coverage calculations do not include system facility charges.
- (5) Purchase treated as a capital expenditure - paid for out of the unrestricted reserve.
- (6) Sewer fund reserve based upon maintaining 3 months of operating expenses. Excess/(shortfall) applied to unrestricted reserve.
- (7) Sewer service charges based on budgeted revenues in 2001 and 2002. For 2003 and beyond charges are calculated based upon projected rate increases.
- (8) Decrease in rates for 2001 and 2002 due to anticipated water conservation effects.

INTRODUCTION AND BACKGROUND

This report has been prepared in support of the Official Statements prepared for the issuance of approximately \$135,750,000 in principal amount of 2001 Senior Lien Revenue Bonds (referred to herein as the "Series 2001 Bonds"). Proceeds from the Series 2001 Bonds, will be used to fund portions of the design and construction of a number of capital improvement projects throughout the City and County of Honolulu's wastewater system. Net funding available for projects is anticipated to be approximately \$125 million. The capital improvement projects are part of an overall, comprehensive Capital Improvement Plan (CIP) initiated in 1998 and spanning approximately 20 years through the year 2017.

2.1 SCOPE OF REPORT

The scope of this report includes:

- A brief history of the City and County of Honolulu's Wastewater Facilities, the adequacy and condition of the existing facilities, and a summary of the major planning activities that have recently been completed.
- A description of the program and projects to be funded with the Series 2001 Bonds, and the associated costs and implementation schedules.
- A summary of the timing and costs of ongoing and future projects as developed for the City and County of Honolulu's wastewater system.
- A description of the sewer service charges and system facility charges over the forecast period.
- A summary of projected revenues and expenditures over the forecast period.
- The opinions of Carollo Engineers as to 1) the adequacy and condition of the existing facilities and the need for the 2001-2005 CIP Projects; 2) the reasonableness of the capital improvement program project cost estimates and schedules; 3) the reasonableness of the assumptions for the financial projections; 4) the adequacy and competitiveness of the City and County of Honolulu's wastewater rate structure, and the adequacy of future revenues to cover operation and maintenance costs, expenses, debt service, coverage, future capital costs, and contingencies.

2.2 ENGINEER'S QUALIFICATIONS

Carollo Engineers, P.C. (Carollo) was selected to prepare this report as a result of their familiarity and knowledge of the City and County of Honolulu's wastewater treatment and conveyance facilities and operation and maintenance practices. Carollo Engineers was responsible for the overall report and financial analysis.

Carollo Engineers is a professional services engineering firm specializing in water and wastewater environmental engineering with 19 main offices and several project offices throughout the west. These

offices are located in Walnut Creek, Sacramento, Fresno, Bakersfield, Santa Ana, San Diego, San Jose, and San Bernardino, California; Denver, Colorado; Phoenix, Arizona; Salt Lake City, Utah; Reno and Las Vegas, Nevada; Portland, Oregon; Austin, Texas; Boise, Idaho; Seattle, Washington; and Milwaukee, Wisconsin. Since its founding in 1933, Carollo has successfully completed more than 6,500 water, wastewater, energy, solid waste, storm drain, and other related infrastructure projects for public agencies, governmental agencies, and industries. Carollo is currently ranked number 103 in the top 500 engineering firms in the United States by Engineering News Record.

Carollo has a total staff of over 450 professional employees including registered engineers in such disciplines as civil, structural, environmental, mechanical, chemical, sanitary, and corrosion engineering along with architects, planners, hydrologists and specialists in other areas. Subconsultants are retained as needed in specialized fields.

Carollo is familiar with the City and County of Honolulu's wastewater facilities through previous studies and evaluations. Carollo Engineers recently completed an Operations and Maintenance Evaluation of the Sand Island WWTP to assess overall effectiveness and efficiency. Carollo has also completed several projects for the City and County of Honolulu in conjunction with R.M. Towill Corporation, including the independent evaluation of ORM of Sand Island WWTP, 1998 Wastewater System Revenue Bonds Engineer's Report, Sand Island Wastewater Treatment Plant Modifications, Sand Island Wastewater Treatment Plant Predesign, Honolulu Spill Prevention Plan, Department of Defense (DOD) Central Oahu Water Quality Study, and the Central Oahu Wastewater Planning Study.

Carollo Engineers has developed award-winning master plans for major wastewater facilities in the west in recent years, including the development of the Sacramento Regional Wastewater Treatment Plant (SRWTP) Master Plan. This Master Plan was awarded the American Academy of Environmental Engineers (AAEE) Excellence Honor Award, and the California Water Environment Association (CWEA) Engineering Achievement Award. Carollo has also completed master planning for over \$6 billion in new wastewater facilities in the last five years for major wastewater agencies including Clark County, and Reno-Sparks-Washoe County (NV); the Sacramento Regional County Sanitation District (CA); the City of Fresno (CA); and several other wastewater agencies.

2.3 OVERVIEW OF THE DEPARTMENT OF ENVIRONMENTAL SERVICES

The City and County of Honolulu's Department of Environmental Services is responsible for the operation, maintenance, compliance monitoring, facility planning and programming, and fiscal planning and execution for the City's wastewater system.

The Department is composed of approximately 590 employees in support of the wastewater program. The Office of Administrative Support provides fiscal control, personnel support and Capital Improvement Plan (CIP) program development activities. The Division of Wastewater Treatment and Disposal and the Division of Collection System Maintenance provide operation and maintenance of the treatment plants, pump stations and the collection system. The Division of Environmental Quality provides performance monitoring, source control and laboratory services. An additional 400 employees support the solid waste collection and disposal program. The Department consists of four divisions and an Office of Administrative Support as presented in Table 1.

Table 1 Listing of Divisions of the Department of Environmental Services City and County of Honolulu Department of Environmental Services	
Division	Responsibility
Wastewater Treatment and Disposal	Operation of Wastewater Treatment Plants and Pump Stations
Collection System Maintenance	Maintenance of Collection System Sewer Lines
Environmental Quality	Pretreatment Program, WWTP Permit Compliance, Storm Water Permit Compliance, Reuse Programs
Refuse Collection and Disposal	Collection and Disposal of Solid Waste
Office of Administrative Support	Fiscal Control, Personnel Support, and Capital Improvement Plan (CIP) Program Development

The Department of Environmental Services was created July 1, 1998 as part of a City wide reorganization to streamline operations. Previously, the Department of Wastewater Management created by a City Charter change effective July 1, 1993, provided operation, maintenance, planning, design and construction of City wastewater facilities. Prior to that time, wastewater management was a division under the Department of Public Works.

The City's Department of Design and Construction provides wastewater facility planning, design and construction in support of the Department. Wastewater permitting is consolidated in the City's Department of Planning and Permitting to provide one-stop permitting service to customers and better relate approval of development plans with City-wide planning.

In recent years, the Department (and its predecessor agencies) has received national recognition for excellence, including the following awards:

- 1986 Operation and Maintenance Excellence Award – USEPA
 - Maunawili Park WWTP (plant no longer in existence)
 - Pa'alaa Kai WWTP
- 1993 Gold Award – Association of Metropolitan Sewerage Agencies
 - Wahiawa WWTP
 - NPDES Permit Compliance for Honouliuli WWTP
- 1995 Gold Award – Association of Metropolitan Sewerage Agencies
 - Wahiawa WWTP
- AMSA Gold Award for 1993, 1994, 1995, 1996
 - Kahuku WWTP
- 1996 Gold Award – Association of Metropolitan Sewerage Agencies
 - Waianae WWTP

- 1997 Gold Award – Association of Metropolitan Sewerage Agencies
 - Waianae WWTP
 - Wahiawa WWTP
 - Kailua Regional WWTP
 - Honouliuli WWTP
- 1997 Platinum Award – Association of Metropolitan Sewerage Agencies
 - Kahuku WWTP
- 1998 Gold Award – Association of Metropolitan Sewerage Agencies
 - Honouliuli WWTP
 - Wahiawa WWTP
 - Waianae WWTP
- 1998 Silver Award - Metropolitan Sewerage Agencies
 - Kailua WWTP
- EPA 1998 First-Place Award for exceptional operations and maintenance, Small Non-Discharging Facility
 - Kahuku WWTP
- 1999 Gold Award - Metropolitan Sewerage Agencies
 - Kailua WWTP
 - Waianae WWTP
- 1999 Silver Award - Metropolitan Sewerage Agencies
 - Honouliuli WWTP
 - Wahiawa WWTP
- 2000 Gold Award – Metropolitan Sewerage Agencies
 - Kailua WWTP
- 2000 Platinum Award - Metropolitan Sewerage Agencies
 - Waianae WWTP
- 2001 Grand Award – American Consulting Engineers Council
 - Nimitz Highway Reconstructed Sewer
- 2001 Grand Conceptor – Consulting Engineers Council of Hawaii
 - Nimitz Highway Reconstructed Sewer

The Department, through the Department of Design and Construction, uses a combination of professional engineering staff and specialty subcontractors to provide project and construction management services. In-house permanent staff is supplemented by hiring outside consultants to work with project staff on an as-needed basis to support project activities. During construction, detailed up-to-date critical path method (CPM) project schedules are maintained. The professional staff provides overall project management and onsite construction inspection.

The City and County of Honolulu has provided project management training sessions for staff engineers who are involved in construction management. The purpose of these sessions is to enhance project management skills for engineers and managers administering capital projects.

2.4 OVERVIEW OF EXISTING WASTEWATER FACILITIES

The wastewater systems service approximately 130,000 separate accounts and a population of approximately 600,000 of the Island's total population of 845,000. The customer base includes the residential population, businesses and industries, and other users located in the 500-square-mile service area. Out of 130,000 accounts, 123,000 are residential and represent approximately 77.8 percent of the total revenue from sewer service charges. The remaining 7,000 are non-residential and represent approximately 22.2 percent of the total revenue from sewer service charges.

General Description of Existing System

The island of Oahu, which constitutes the City and County of Honolulu, is divided into eight wastewater basins: Central Oahu, East Mamala Bay, Kailua/Kaneohe/Kahaluu, North Oahu (East), North Oahu (West), Waianae, Waimanalo, and West Mamala Bay. Each basin is served by a major WWTP. The basins and the associated WWTPs are shown in Figure 1 and listed in Table 2.

Table 2 Wastewater Drainage Basins and Major Facilities City and County of Honolulu Department of Environmental Services			
Region	Basin	WWTP	Discharge Location
Metro	• East Mamala Bay	• Sand Island	• Ocean
Leeward	• West Mamala Bay	• Honouliuli	• Ocean/Reuse
	• North Oahu (West)	• Pa'alaa Kai	• Injection Wells
	• Waianae	• Waianae	• Ocean
	• Central Oahu	• Wahiawa	• Reservoir
Windward	• Kailua/Kaneohe/Kahuluu	• Kailua Regional ⁽¹⁾	• Ocean
	• North Oahu (East)	• Kahuku	• Injection Wells
	• Waimanalo	• Waimanalo	• Injection Wells
Notes: (1) Includes Ahuimanu and Kaneohe Wastewater Preliminary Treatment Facilities.			

Almost 95 percent of the wastewater flows are treated by the three largest facilities: the Sand Island WWTP, which treats 67.6 million gallons per day (mgd) of average dry weather flow (ADWF) from Honolulu, the Honouliuli WWTP, which treats 26.8 mgd ADWF from the Ewa, Mililani, and Pearl Harbor areas, and the Kailua Regional WWTP, which treats 13.0 mgd ADWF from the eastern populated areas of the island. Flows for each wastewater facility are presented in Figure 2 and summarized in Table 3. Descriptions of the wastewater basins and major facilities are provided below.

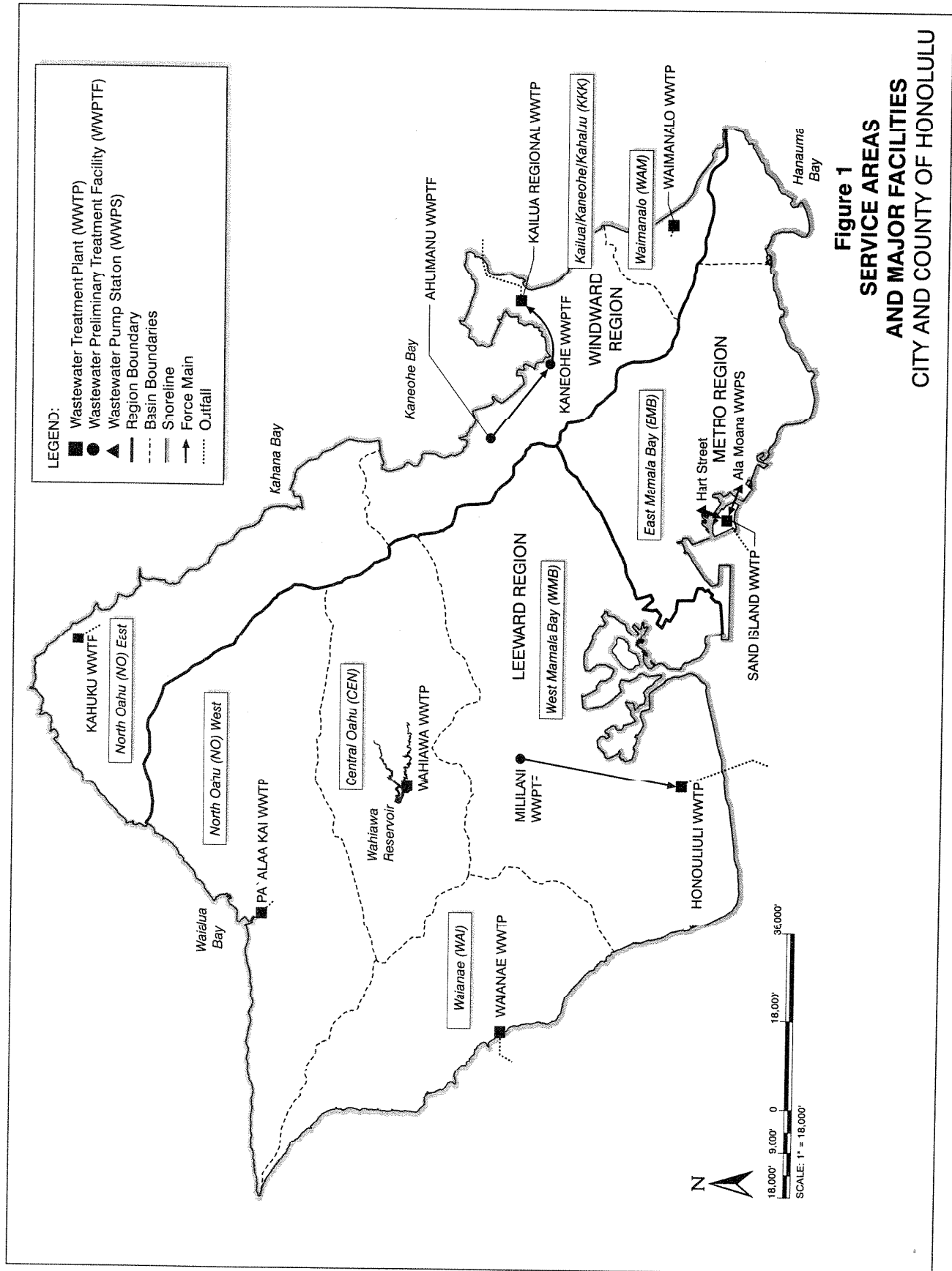
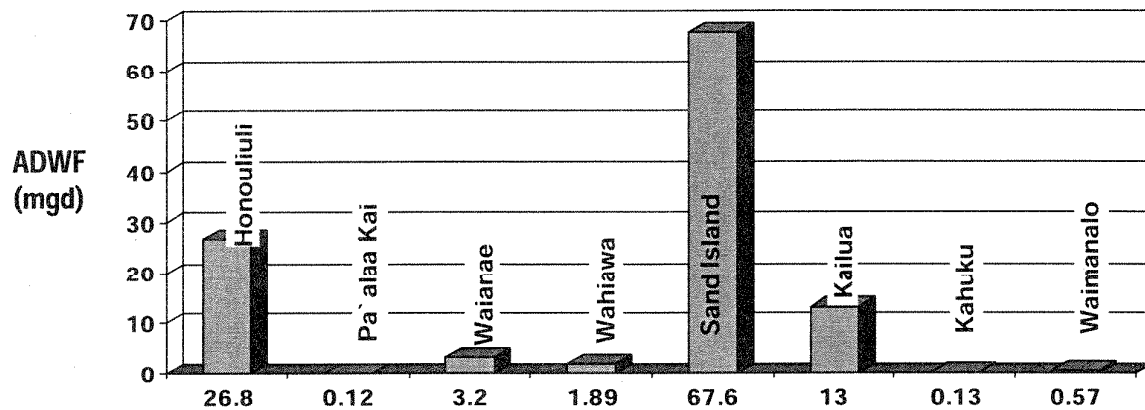


Figure 1
SERVICE AREAS
AND MAJOR FACILITIES
CITY AND COUNTY OF HONOLULU



Total = 113 mgd

ADWF = Average Dry Weather Flow

Figure 2
SUMMARY OF EXISTING WASTEWATER
TREATMENT FACILITIES AND FLOWS
CITY AND COUNTY OF HONOLULU

Table 3 Wastewater Flows by Treatment Facility⁽¹⁾ City and County of Honolulu Department of Environmental Services			
Treatment Facility	Design Capacity (mgd)	2000 Flow (mgd)	Projected 2020 Flow (mgd)
Sand Island WWTP	82.0	67.6	92.6
Honouliuli WWTP	38.0	26.8	32.8
Pa'alaa Kai WWTP	0.14	0.12	0.14
Waianae WWTP	5.2	3.2	3.5
Wahiawa WWTP	2.5	1.89	1.89
Kailua Regional WWTP	15.25	13.0	13.4
Kahuku WWTP	0.4	0.13	0.15
Waimanalo WWTP	0.7	0.57	0.62
Total	144.19	113.3	145.1
Notes:			
(1) Average dry weather flow, millions of gallons per day.			
(2) Does not include 0.3 mgd of flow from the City's Kuliouou WWPS which is treated by the Hawaii Kai WWTP, a private treatment facility.			

East Mamala Bay

The largest and most densely-populated wastewater basin has a population of approximately 374,400 and is served by the Sand Island WWTP. Built in the 1970s, the Sand Island WWTP currently treats 67.6 mgd of wastewater flow and has a primary treatment capacity of 82 mgd. The wastewater facility serves the City of Honolulu and surrounding areas.

West Mamala Bay

The second largest basin has a population of approximately 239,700 and is served by the Honouliuli WWTP. Built in 1981, the Honouliuli WWTP currently treats 26.8 mgd of wastewater flow and has a primary treatment capacity of 38 mgd. A secondary treatment capacity of 13 mgd was added in 1997. The wastewater facility serves Ewa, Central Oahu as far north as Mililani, and the Halawa to Pearl City area of the Primary Urban Center. Secondary treated effluent is provided to a recycled water facility.

Kailua/Kaneohe/Kahaluu

The third largest basin has a population of approximately 106,300 and is served by the Kailua Regional WWTP, which serves the communities of Kailua, Kaneohe, Kahaluu, and surrounding areas. The Kailua Regional WWTP was built in the 1950s and was upgraded to secondary treatment in 1995. It currently treats 13.0 mgd of wastewater flow and has a secondary treatment capacity of 15.25 mgd.

North Oahu (East)

The North Oahu (East) basin is largely unsewered and is served by the Kahuku WWTP. Built in the early 1980s, the Kahuku WWTP currently treats 0.13 mgd of wastewater flow and has a secondary treatment capacity of 0.4 mgd.